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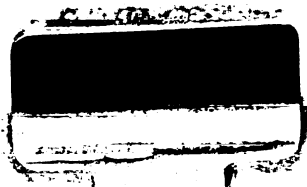
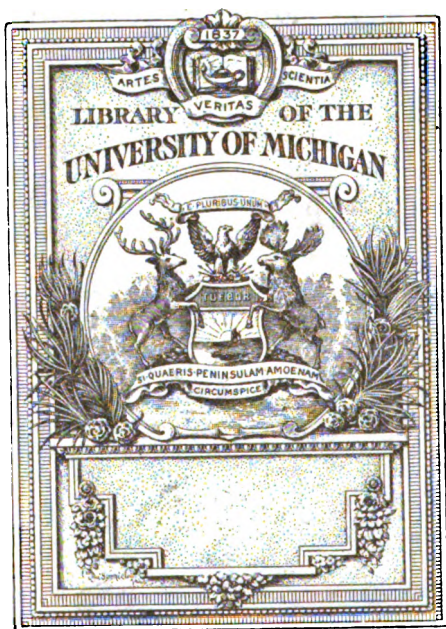
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*The Kansas City
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EDITED AND PUBLISHED BY

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Hm. E. Lume

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ORIGINAL ARTICLES.

THE TOPOGRAPHICAL ANATOMY OF THE ABDOMEN.*

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It has been the custom, handed down from ancient times by anatomists and diagnosticians, to divide the abdomen for descriptive purposes into nine regions by means of two vertical and two horizontal lines, the location of the lines varying with the different authors. The perpendicular lines vary in their point of origin from the pubic spine, or the center of Poupart's ligament, to as far out as the anterior superior iliac spine; while the horizontal lines are given variously, as a line connecting the "lowest point of the ribs," "the cartilages of the ninth ribs," and the "cartilages of the eighth ribs," for the superior line; and for the inferior line, "the crests of the ilia," "the anterior superior spines," or "the centers of Poupart's ligaments." Morris says, in his excellent anatomy that "it would probably be better to discard the two horizontal and two vertical lines, and divide the abdomen simply by one horizontal line passing through the umbilicus, and then by two vertical lines from the middle of Poupart's ligament, thus making right, left and middle superior regions and right, left and middle inferior regions." But this would render the older references unintelligible. Considering then that it is more advisable to retain the old nomenclature, we will settle upon the most practicable locations for the horizontal and perpendicular lines. Let the superior horizontal lines connect the lowest points of the ribs, while the inferior line connects the two anterior superior iliac spines.

The two vertical lines are best described by the outer borders of the rectus muscle which are always easily distinguishable, their origin being fixed by the pubic spines; their outer margins being generally easily felt, and their insertions being into the cartilages of the 5th, 6th and 7th ribs and the ensiform

* Abstract of a lecture delivered December 21st and January 4th (introductory to the study of the anatomy of the abdomen) before the class of the Kansas City Medical College.

cartilage; should much fat obscure the abdomen their outer margins may be designated by a line drawn on either side from the pubic spines to the tip of the 9th rib, or rather of its cartilage. The regions thus formed are named right and left hypochondriac and the epigastric as the three upper regions, the right and left lumbar and the umbilical as the middle regions, and the right and left inguinal and the hypogastric as the three inferior regions.

This places the umbilicus in the middle of the umbilical region, and while not the one adopted by the majority of the authors, it seems to me the most advisable, as it is the most simple.

The superior horizontal line will cut through the stomach, transverse colon, ascending and descending colon, the duodenum, and the kidneys; while the lower cuts the small intestines, the cæcum or the lower part of the sigmoid flexure, the fundus uteri, ovaries, Fallopian tubes, and the distended bladder.

The regions of the greatest interest are, first: the right hypochondriac, containing the gall-bladder and sometimes the pylorus, second: the right inguinal, containing the appendix, and the inguinal and femoral openings through which hernia so frequently occurs; third: the left inguinal, on account of the possibility of hernia in this locality, and last the epigastric in which we find usually the pylorus, the head of the pancreas, (frequently the seat of tumors,) the upper and inner portion of the kidneys, and the common bile ducts, the localities harboring calculi.

It is, of course, well to remember that the three locations through which the abdomen may be entered without interfering with arteries or veins and thereby causing hæmorrhage, are either of the two lineæ semi-lunares and linea alba; at these locations no muscular structure will be severed and the possibility of oozing of blood will be avoided. The linea alba is the meeting of the aponeuroses of the great abdominal muscles. These, securely fastened to the ribs above, to the iliac bones below, and the spine and lumbar fascia behind, encompass the abdominal cavity and expand into a fibrous aponeurosis which passes over, under and between the recti muscles, and interlaces in the median line with its fellow of the opposite side. The recti muscles are two broad, flat, bands of muscular fibers about two inches in width, and about one-half inch in thickness that extend from the pubic bones below to the fifth, sixth and seventh ribs above where their attaching fibers interdigitate with the fibers of the diaphragm. They are crossed by three transverse septa, the lineæ transversæ. Three layers of muscle compose the side of the abdomen. The fibers of the external oblique muscle (the outer layer) run in a diagonal direction from above downward and forward, and its aponeurotic fibers pass, in the main, *over* the rectus. The fibers of the internal oblique muscle (the middle layer) pass, in the main, obliquely upward and forward at an angle with those of the preceding,* and its fibers divide and pass part above and part below the rectus; while the fibers of the transversalis (the third layer) pass transversely forward and inward and its fibers pass *under* the rectus; all then meeting and interlac-

*The fibers of the Internal Oblique Muscles do not all pass upward and inward. Its origin is from the outer half of Poupart's ligament, the anterior two thirds of the middle lip of the iliac crest, and from the lumbar fascia. Its lower fibers pass downward and forward to the pectinealline and the pubic crest and transversely forward to the linea alba, while its middle and upper fibers pass as above stated.

ing with the aponeurosis of the opposite side form the linea alba; its thinness and its non-vascularity make it a favorite place for abdominal incision.

Another point of election for incision is the linea semi-lunaris on either side. This is a fibrous union of the aponeuroses of the three abdominal muscles just prior to their passage around the rectus muscle. You can see it on the cadaver here, as a lighter colored space just external to the outer border of the rectus and extending from the pubic spine to the ninth costal cartilage, a little curved, with its convexity outward. The lineæ transversæ run between the linea alba and the lineæ semilunares, three transverse fibrous bands through the substance of the rectus muscle; one at the level of the umbilicus and two above. Contraction of a portion of the rectus between two of these lines frequently resembles a tumor and this possibility should always be borne in mind when considering a small abdominal tumor.

The umbilicus lies at the junction of the upper three-fifths with the lower two-fifths of the linea alba; this corresponds to a point one to one and a quarter inches above the bifurcation of the abdominal aorta—to the tip of the spine of the third lumbar vertebra—to the fibro-cartilage between the third and fourth lumbar vertebra, and to the highest points of the iliac crests.

In very fat subjects two quite deep furrows pass across the abdomen; one crosses the umbilicus and often hides it from view and the other passes from one iliac spine to the other curving downward and is just above the pubic fat. Holden says that at the point where this furrow crosses the linea alba is the proper place to introduce the trocar in tapping the abdomen.

I have previously told you how, when making a vaginal examination in fat subjects to manipulate the abdominal muscles and fat and the perineum, in order to reach the female pelvic organs with the examining finger, and here again let me call your attention to it. Dr. Harris A. Slocum, Professor of Gynecology in the Philadelphia Polyclinic has so clearly described the method that I reproduce his description from a report of his lecture in the Polyclinic.

"Among other matters which will be found to vex you will be the examination of very stout women. It seems, in some cases, to be an utter impossibility to arrive at any satisfactory conclusion regarding the condition of the tissues underlying a very thick abdominal wall.

The fat seems to be defiantly placed just where you are accustomed to place your external hand, and the case is apparently a hopeless one for examination.

There is, however, one part of the abdominal wall, a narrow zone running from side to side, where we will almost invariably find such diminution of the adipose layer as to enable us to make a fairly thorough exploration. Even in patients who are enormously enlarged, I have seldom failed to recognize the advantage this region offers, and as its position is from one to three inches below the ordinary point for pressure, varying in different women, according to the position of the uterus, I find it is often overlooked.

The fat on the abdominal wall is thickest in the region of the umbilicus, thinning off rapidly towards the flanks, and more gradually in the direction of the sternum above and the pubis below.

The latter is the region we have to deal with, and if you will examine such a patient you will find a depressed, curved line, a groove in very stout people, running from one anterior iliac spine to the other, with its convexity towards the mons veneris and generally just touching the upper border of the growth of hair.

At this groove and for a distance of, generally, half an inch or more above it, the fat will be found in least amount, but very quickly increasing towards the umbilicus.

The loose connective tissue fibres joining the fat layer with the subjacent one permits of a moderate mobility, and this is utilized in the following manner: Place the finger tips in the groove and depress. You will probably come upon the anterior face of the uterine body near the fundus. To examine the latter, move your fingers half an inch above the groove, where the connective-tissue fibres are longer, and push skin and fat before them until they are over, or a degree behind the fundus. If you were to lift your hand and allow the tissues to return, you would probably find a decided wedge of fat interposed, on replacing your fingers at the same distance above the pubic bone."

Holden called attention to the fact that a line drawn transversely from one anterior superior iliac spine to the other is about at the level of the promontory of the sacrum. Such a line will always show whether the pelvis is horizontal or not. You see how the ruler tilts when I press upward upon the foot thus tilting the pelvis.

Poupart's ligament corresponds to a line with a slight downward curve from the anterior superior iliac spine to the pubic spine. Both these bony prominences are landmarks of importance. The first being the starting point of the above ligament, the attachment of the fascia lata to the ilium, the meeting of the aponeurotic parts of the external oblique muscle, (*i. e.* the linea-semilunaris) and the point of origin of several muscles in whole or in part. The pubic spine marks the inferior margin or "outer pillar" of the "external abdominal ring." The mouth of the ring rests upon the crest of the pubes, that part lying between the spine and the symphysis. The "internal ring," with the deep epigastric artery to its inner side, lies about one half an inch above the center of Poupart's ligament and the "canal" runs obliquely downward and forward between them, between the external oblique muscle and the conjoined tendon of the internal oblique and the transversalis. When I invaginate the scrotum on my finger I can pass it into the external ring and can feel Poupart's ligament and the pubic spine and crest. I wish you all to feel this ring now, and the anatomy of hernia will be deferred until a later lecture.

The three superficial branches of the femoral artery furnish the blood supply to the skin of the lower abdomen, groin and genitals; the epigastric branch of the internal mammary anastomosing with the deep epigastric supplies most of the deeper layers of the abdominal wall, the balance of the blood supply coming from the abdominal branches of the lumbar arteries, the circumflex (deep) and the last two intercostals. The course of the deep epigastric should be remembered and is designated by a line drawn from the center of Poupart's ligament to the inner side of the internal ring and thence to a point

half way from the pubes to the umbilicus. Here the vessel enters the sheath of the rectus muscles and passes upward. Upon the right side the arching roof of the abdomen—the diaphragm—rises to the level of the fifth rib, on the left side to the level of the sixth. Upon the left side in contact with the diaphragm lies the stomach and on the right side the liver. Care should be taken in passing an aspirator needle or trocar to remember this and avoid wounding the diaphragm; as I open the abdomen of this cadaver you will notice the height to which the liver rises. The knife point resting but two inches below the nipple is opposite the upper portion of the liver and as I pass it inward you perceive it passes through the pleural cavity, the lower portion of the right lung and the diaphragm, and appears in the abdominal cavity, yet the scalpel blade is much shorter than an aspirator needle. Remember this fact please in using trocars in the pleural cavity.

The lower border of the liver reaches one half an inch to one inch below the costal border on the right side. It lies across the median line from one and one half to two inches on the left side and should show dullness on percussion in the adult for about four inches in the nipple line on the right side. The liver forms one-fortieth of the body weight of the adult male, one thirty-sixth of the body weight of the adult female, one twenty-fourth of the infant and one-tenth of the fetus at the fourth month of gestation. Thus a much larger allowance for size should be made in the case of children. Its gall bladder lies opposite the ninth costal cartilage and under the outer border of the rectus muscle; it is in contact with the hepatic flexure of the colon and, when distended, with the abdominal wall. The incision for reaching it should pass through the linea semilunaris (I prefer the vertical direction) unless the prominence of the tumor is in a different locality and indicates other incision.

The ligaments, lobes and ducts of the liver will be studied later.

The spleen lies on the left side between the fundus of the stomach and the diaphragm, covered by the ninth, tenth and eleventh ribs and separated from them by the diaphragm and lung. It is frequently wounded by ignorant or careless attempts to tap the extreme lower point of the pleural sac. A line drawn from the sterno-clavicular joint to the tip of the eleventh rib strikes the anterior border of the normal spleen. It may be enormously enlarged.

The pancreas lies in the epigastric and left hypochondriac regions, the tail, (left extremity) touching the spleen and the head, (right extremity) in the bend of the duodenum and touching the common bile ducts; it is thus behind the stomach. Its ducts and blood supply you will learn from future study.

The kidneys lie at the back of the lumbar region outside the peritoneal cavity and reach from the eleventh rib almost to the iliac crests, the left being a little higher than the right. Their anatomy will be studied as you reach them in recitation and dissection.

Dr. Edward D. Garner, of St. Joseph, has been appointed a member of the State Board of Health in place of Dr. J. D. Griffith of this city, whose term had expired. Dr. Griffith declined reappointment on account of lack of time to attend to his official duties without sacrificing part of his large surgical practice.

SURGICAL TREATMENT OF FIBROID TUMORS.*

BY H. C. CROWELL, M. D., KANSAS CITY, MO.

Although fibroids have been dealt with surgically for many years, I think we may safely say that not until within the past two years has the subject been thoroughly sifted and reduced to such an understanding as to admit of little controversy as to the technique and method to be employed. Many have been the procedures in the disposition of this class of tumors since first surgery was brought to bear upon them. Most of them have been attended with either difficulties of execution or an unwarrantable mortality, both of which have served to retire the method and invite investigation in search of a better.

Many clung for a long time to the intra-peritoneal method which consisted of various modes of treating the stump—until recently the great bugbear of hysterectomy—dropping it into the peritoneal cavity. The mortality by this method caused most men to abandon it for some other plan. Enucleation was practiced with some encouragement and may yet be employed in certain cases with safety if it seems especially desirable from family considerations, though it does not appeal to us as possessing any superiority over extirpation of the uterus.

We are disposed to think that there can be no gain to the patient by enucleation save in very exceptionable cases and we fear that the results in any considerable number of cases will be disappointing to its advocates.

Ligation of the uterine arteries has not, as yet, had sufficient test, to pass upon as a method to be employed in any, save very early cases, and in these we are prepared to hear as we now do of ovariectomy, for the same purpose, that it does not check the growth in every instance. After reviewing, in a general way, we come down to but two really recognized methods to be applied in the majority of cases of fibroids applying to the surgeon, viz.: by the Keoherly serre neud or the supra-vaginal method and that of total extirpation.

By the supra-vaginal method we understand that the fibroid and uterine body is amputated about the internal os uteri or lower segment of the uterus, a stump being formed of that which remains and being clamped by the wire neud, is fixed and held suspended in the lower angle of the abdominal wound by transfixion pins; all raw surfaces being extra peritoneal. By the total extirpation we understand the entire uterus is removed with the fibroid, no stump being left. All raw surfaces being turned into the vagina and in most cases rendered entirely extra peritoneal.

Some individual preferences and practices have been introduced to obviate the stump of the supra vaginal method and each having given good results in the hands of its inventor, reference to them at this time seems unnecessary. Our aim at this time will be to consider the two great methods side by side, as fairly as may be, with an endeavor to so examine them that we may choose of the two, which shall serve us in general or special cases. I have thought that no better way of arriving at such conclusions could be

*Read before the Academy of Medicine, Sept. 15, 1894.

found than that which has served during all time, viz.: The citing of cases with progress, employing the two methods by the same operator with the same degree of care as to technique, etc. With the two methods I have had experience which I trust will enable me to speak advisedly giving my impressions and preference.

I have had but one death from these operations for fibroids and that one occurred after employing the method of total extirpation. The first case in which the neud was used, I may say, was not a fibroid; but since its use was the same in every detail it will serve our purpose:

Case operated upon October 29, 1891.

The technique of the operation was observed with scrupulous care. The pins were supported upon iodoform gauze as well as possible and yet the dragging was such that quite considerable cutting into the soft parts resulted, causing very great discomfort to the patient. The stump was frequently dressed and kept as dry as possible with iodoform. The temperature of the patient did not exceed 102°. Her progress was very even and satisfactory up to the time of the coming away of the cervical stump pierced by the needle, at least no grave symptoms causing us any great anxiety presented. The pins were removed on the fifteenth day. We then had a deep wound in the lower angle of the abdominal incision which was granular and secreted very profusely. We irrigated, packed and exercised every endeavor to effect a closure, but such was not possible. A communication remained direct through the abdomen and cervix to the vagina, small it is true, but nevertheless a fistulous tract. Failing all our efforts at closure, on July 6, 1892, I removed the cervix per vagina expecting certain and speedy closure to follow; but still our tract remained open. After employing every known means to affect a cicatrization without result, on August 27, 1892, I opened the abdomen and removed the fistulous tract.

To one side of the tract was found an encysted abscess which had formed alongside the pedicle and continued to keep up the purulent discharge and patency of the canal which otherwise would probably have healed, kindly given sufficient time. Such accidents as this abscess formation in the cellular tissue about the pedicle are not rare I am informed by those competent to speak. This case, however, eventually made a perfect recovery.

The next case by the same method was done September 7, 1892: The specimen which I presented showed how perfectly the tumor was enucleated even down into the cervix below the point of constriction by the neud; the stump came away on the fifteenth day leaving an opening through into the vagina; cauterized with paquelin; all means failed to close it. After six weeks of delayed convalescence tried to remove the cervix per vagina but was unable to reach it. Much suffering was experienced by this patient from the pressure of the pins and dragging, she being very fleshy. The dragging seemed to interfere with the movement of the bowels for a long time; there was also a troublesome disuria. Patient was discharged from the hospital with a fistulous tract permitting vaginal secretions to come out above. After several weeks of the let alone policy, save endeavoring to keep clean, the

opening closed, but not until after the patient had been afforded the pleasure of making numerous visits to the office to give vent to her many woes, aches pains and censure me for not having done a total extirpation as I had on another patient who had convalesced and gone home before this patient, though operated upon some five or six weeks later. This patient never felt grateful or satisfied until some six months ago when I received from her a very happy letter effulgent with apologies.

May 3, 1892, I operated for a very large fibrocystic tumor by the neud method. Great care was given every detail both in operation and subsequent care and yet cellular abscesses developed about the stump making a prolonged convalescence though ultimate recovery ensued. The convalescence in these cases is usually from six weeks to three months.

Case operated upon October 24, 1892, was by the total extirpation method. Case was complicated by a large ovarian abscess which broke, necessitating irrigation before the tumor and uterus could be removed. Patient made an easy convalescence without pain or unfavorable symptoms; went home after three weeks stay in hospital. In this case the Krug method of extirpation was employed. Ligation of ovarian arteries on either side, then the uterine, drawing the uterus out over the pubes, the vagina is entered from behind at the cervical junction, the incision encircling the cervix. The ligatures of silk left long are twisted into a cable and passed down through the vagina. Strips of iodoform gauze passed loosely into the vagina from above cover all denuded surface intra peritoneally. The sigmoid is allowed to drop down over the opening into the vagina; the abdominal incision is then closed without drainage.

April 18, 1893. Case of intra ligamentous tumor removed by total extirpation. Tumor was very large involving both broad ligaments necessitating their being split fairly wide open before the tumor could even be elevated, gave rise to a considerable loss of blood at the time and left exposed a most unusual oozing surface. This patient died from the shock and loss of blood. All who are familiar with the literature upon the subject of intra ligamentous tumors will recall the unfavorable prognosis accorded such cases by whatever method. I do not feel that this loss should be in any way chargeable to the operation, though it may be to the operator.

In this case no other operation could serve as well as total extirpation. Should another like case present to me I should trust less to my packing and make more persistent efforts to control the oozing even at the sacrifice of an unusual length of time, believing that the chances for the patient would be better even though I did.

Passing over the next four cases of total extirpation, I will refer to a case done much after the method of Edebohls, which, in my judgment is superior to the method which I previously described. The specimens which you saw here and some of the others were removed by the same method. The patient in the Trendelenburg position, as all cases for hysterectomy for fibroids should be, an incision large enough to allow of the extrication of the tumor is made extending well down to the pubes. The ovarian arteries, broad and round

ligaments were ligated including the broad ligament down to a point just above the bladder attachment to the uterus on both sides. Pean clamp forceps were placed upon the broad ligament next to the uterus to prevent reflux of blood, when the broad ligaments were cut. From either side of the uterus, anterior and posteriorly, an incision is made severing the peritoneum which is stripped down anteriorly, elevating the bladder and posteriorly to the cervico vaginal junction. In this case instead of at once ligating the uterine arteries as is usually done, I grasped them on either side with a Pean forcep and then excised the cervix. No bleeding to mention occurred. The uterine arteries were then tied as had been the ovarian with catgut and cut short. The vagina having been firmly packed prior to the operation, was now emptied and strips of iodoform gauze were passed down through the vaginal canal for drainage from the cut surfaces. The peritoneal flaps were then sewed together, completely closing off all raw surface, making such practically extra-peritoneal and safe as against infection or intra-peritoneal hæmorrhage, should any occur. The abdomen was now closed without drainage. The gauze drain was allowed to remain five days. It was then removed and found to be perfectly sweet and clean; a gentle douche of Thiersch's fluid was then given; light gauze drain per vagina thereafter. Patient presented no untoward symptoms from first to last nor did she experience any more pain than do all cœliotomies from the abdominal incision for thirty-six hours. Not more than one-half ounce of blood was lost during the operation which was completed and patient returned to bed in 43 minutes. There was absolutely no shock. The only thing of which the patient complained was a burn which by some accident occurred to her side. In regard to the time for doing the two operations by the neud or by total extirpation, I think there is little difference in like cases. If any thing, I believe that the total extirpation can be done quicker by men experienced and familiar with its technique. It has been claimed that the mortality by total extirpation was greater than by that of the neud. In considering this aspect of the case we must bear in mind that total extirpation, save in the hands of very few, is a comparatively new operation. It is only within the last two years that it has become at all general. We must wait then until the technique shall have been well established and practiced before we condemn it upon those grounds.

Premising what should reasonably be expected of the operation, we must remember that it was suggested in this field of operative procedure for fibroids, from an observation that cases of vaginal hysterectomy did so universally well and showed such a low mortality. I think, from present indications, total extirpation for fibroids will soon show a mortality no higher than that of vaginal hysterectomy and equally as low as that by the neud which has made a good record. If such shall be the case, it is apparent to everyone how infinitely more comfortable it will be for the unfortunate patient requiring it.

We find that owing to the tender age of total extirpation there are few tabulated statistics. We might refer to a few gathered here and there from various operators and methods for the purpose of comparison. Polk in 1890 reports 7 cases of total extirpation; all did well. Byford by his method (which

is practically total extirpation as the entire uterus is removed and only a small piece of the cervix left which is inverted into the vagina),—31 cases, 3 deaths. Common aphorism of to-day might be here cited relative to total extirpation.

Stansbury Sutton said last year that he believed we were on the eve of removing the cervix entire. "The Trendelenburg position makes possible any intra pelvic surgery. The field of work is open to the eye. It is as easy to remove the cervix as it is to take care of it in the angle of the wound. When I recall that every case having the uterus removed per vagina recovered I am persuaded that the days of hysterectomy with a pedicle are limited." Cragin had two cases, both recovering. Edebohls some time since reported 6 with no deaths. In a report from nineteen operators doing 652 operations, there were 119 deaths by the extra peritoneal method in 589 cases or 19.54 per cent. mortality; 52 cases by total extirpation with 8 deaths or 5.36 per cent. of mortality. Baldy reports 41 cases of supra vaginal hysterectomy with 4 deaths in the *Archives of Gynecology*, August, 1894; by Meyer we get some interesting figures upon mortality in operations for fibroids. Castration, 8 cases with 3 deaths. Vaginal enucleation 15 with no deaths. Myomectomy without opening uterine cavity 33 and 7 deaths. Myomectomy opening the cavity 3 and 1 death. Supra vaginal hysterectomy with extra peritoneal treatment of the stump, 30, 7 deaths (23.30 per cent.) Supra vaginal amputation with intra peritoneal treatment of the stump, 21, 4 deaths (19 per cent.) Vaginal hysterectomy 4, no deaths. Total extirpation 5, 1 death (20 per cent.) Polk in 1892 reported 11 cases extra peritoneal method with 2 deaths and 18 total extirpation with 2 deaths. Baer says he never expects to again perform vaginal hysterectomy since total extirpation per abdominis has shown him such good results and ease of execution. After reviewing the opinions of some of our leading operators and teachers, after comparing statistics which as I said before, are very meagre and scattered on total extirpation, I find I have collected 114 cases with 14 deaths, or 12.28 per cent. mortality. By the extra peritoneal method 671 cases with 132 deaths or a mortality of 19.67 per cent. It may not be unfair to again advert to the fact that these statistics for total extirpation are taken very early in its history and in several instances comprise cases of intra ligamentous tumors where the serre neud could not be employed, because of an inability to raise the uterus to form a stump; and if it were done, these are cases where the dragging would almost if not entirely preclude the use of the serre neud. Polk says, "of this class of cases they furnish all the bad cases and are so difficult that the enemies of the operation would have ample material to work on if statistics were taken" (not referring to any particular method in this connection.)

Finally, after having made this paper too long I must arrive at the following conclusions that have induced me to adopt total extirpation as the ideal and practical operation to be employed in the extirpation of fibroid tumors:

- 1st. It is surgical and not difficult or dangerous to perform.
- 2nd. It secures, by total removal of the uterus, natural, free and perfect drainage through the vagina.
- 3rd. The convalescence is ideal and free from suppurative processes or pain.

4th. No dragging upon adjacent viscera occurs from this operation.

5th. The troublesome suppurating stump of the neud method is done away with.

6th. In average cases the convalescence is established in three days and in three weeks they may be discharged cured.

7th. From a cosmetic point of view by this method, we obviate the unsightly scar as well as the very great liability to hernia, fistula, etc.

LIGATURE OF THE SPERMATIC CORD IN THE TREATMENT OF HYPERTROPHY OF THE PROSTATE GLAND.*

BY J. EWING MEARS, M. D., PHILADELPHIA, PENN.

In the male subject the function of the generative apparatus involves the secretion of semen, and, under certain conditions, its ejaculation. The former is accomplished in the testes, and the latter by the vasa deferentia, the vesiculæ seminales, the prostate, the urethra and penis.

In order to explain certain forms of hypertrophic changes occurring in the prostate gland, I think it necessary to consider the anatomical structure of the ejaculatory apparatus. Portions of this are tubal in character, forming ducts or canals, as the vasa deferentia and urethra; the vesiculæ seminales are composite organs, not mere receptacles for the accumulation of semen, but possessing secretory power; the prostate is more of a muscular than a glandular organ. As determined by the investigations of Kölliker, the glandular substance does not constitute more than one-third or a half of the whole mass; the vasa deferentia, according to the same author, are endowed with a colossal muscular apparatus, and are stated to be chiefly operative in ejaculation. The seminal vesicles and ejaculatory ducts exhibit the same muscular structure as the vasa deferentia. All parts of the ejaculatory apparatus possess what is essential to their functions—a redundancy of muscular fibres. I refer to these well-known anatomical facts in order that they may be considered in connection with certain forms of prostate hypertrophy.

Enlargement of the prostate may be due to inflammation—acute or chronic—sometimes eventuating in abscess; cystic degeneration, which is rare; tuberculosis; myomatous growths; carcinoma; simple hypertrophy. Cystic, tubercular, and carcinomatous affections of the prostate may be eliminated from consideration on this occasion as being without the circle of conditions possible to be relieved or in any way affected by the plan of treatment to be discussed. The remaining affections clinical observations have, I think, satisfactorily determined as enjoying intimate relations with the functional activity of the secretive organs of the generative apparatus, and therefore affected by any conditions which control this.

An organ in a state of inflammation requires, in order that it may return to a normal condition, a cessation, so far as it is possible, of its functions; if this is not accomplished the inflammatory action progresses, with the resultant

*Read before the Philadelphia Academy of Surgery, Nov. 5, 1894.

effects of plastic deposit, increase in size, the course of the inflammatory action terminating in this stage, or possibly continuing to the suppurative stage.

In myomatous growths of the uterus clinical observation records the fact that in married women, or in single women in whom the sexual activity of the generative organs is maintained, these develop more rapidly and attain a larger size than in the unmarried female or in the single female who does not indulge in sexual congress.

Clinical investigation has also determined the fact that simple hypernutrition is the result in many instances of over-stimulation; of inordinate functional activity. In this manner it is possible to account for simple hypertrophy of the prostate, that condition which more than any other is responsible for the serious secondary conditions manifested in the urinary apparatus. With this condition the surgeon has to deal oftener than with any other form of hypertrophy occurring in the gland. Examination of specimens of prostate glands affected with simple hypertrophy shows, according to Billoth, that there is no increase in the glandular elements, but simply expansion of the acini and epithelium hyperplasia. The frequently observed enlargements of the gland depends essentially on diffuse myoma.

The question as to the occurrence of hypertrophic changes in the prostate gland at a period of life when, on all other glands and tissues of the body the law of atrophy assumes sway, has often been asked, but never satisfactorily answered. May the answer not be found in its anatomical structure and in its anatomical and physiological relations. In structure and function it is composite. The arrangement of its muscular fibres would seem to indicate that their duty was more than that which relates to the function of the glandular portion of the organ—more than the simple expulsion of the secretion of the gland into the general ejaculatory canal. Placed near the culmination of the forces concerned in the expulsion of the spermatic fluid, its function would appear to be that of a reinforcing agent—of giving increased propulsive movement to the column of fluid which it may be comes only from the seminal vesicles or from both vasa deferentia and seminal vesicles. Is the hypertrophy, therefore, conservative in character, occurring at a period of life when nerve power declines and the other muscular portions of the ejaculatory apparatus yield to the law of atrophy?

It is my observation that the form of hypertrophy under discussion occurs in those who have over-indulged the sexual appetite—who have kept the generative organs in prolonged state of excitement with, in many instances, incomplete acts, or without acts of coition, these conditions resulting in over-stimulation of the gland.

Coming now to the plan of treatment suggested in the title of this brief paper, it would appear to be both philosophic and physiologic, as an effort has been made to show that the pathologic condition present is directly associated with the functional activity of the generative apparatus. Obliterate this, and all organs associated in the production of this function will be affected. Without the organs for secretion of semen the ejaculatory apparatus has no function.

The eminent Rokitsansky long since observed that the prostate is generally found to be small when the organs of generation are in imperfect condition, and a diminution of the prostate with relaxation of the glandular tissue has been observed as accompanying atrophy of the testes.

To obliterate the function of the generative apparatus is therefore a rational method of treatment in prostatic hypertrophy of the forms above mentioned. How can this be accomplished? Dr. J. William White in an elaborate paper on "Surgery of the Hypertrophied Prostate," read before the American Surgical Association, in 1893, referred to the operation of castration as a therapeutic measure in hypertrophy of the prostate, and reported a number of experiments which were conducted on dogs, showing that removal of the testes in these animals was followed by prostatic atrophy. Without doubt castration would prove effectual in the production of atrophy, and the reports of cases have appeared in recent current surgical literature in which positive relief was afforded by the operation. It is an operation, however, to which patients will naturally refuse to submit unless in the very last stages of diseases of the bladder resulting from prostatic obstruction.

In the discussion which followed the reading of Dr. White's paper I suggested the ligature of the vas deferens as an operation which would probably be as efficacious as castration, and one which I believed would be accepted by patients. I have seen the report of one case in which this operation has been performed since that date with a successful result.

Within the last year I have taken occasion to examine patients on whom I had performed subcutaneous ligature of the vessels of the cord for varicocele, and I have observed more or less atrophy of the testes in these cases. In all the vas deferens was not excluded in the ligature. One patient, aged at the time of the operation, eighteen years, reported that subsequent to the operation nocturnal emissions, from which he had suffered greatly, disappeared, showing, I think, the relief afforded to prostatic irritation by the operation.

Inclusion of the vas deferens in the ligature applied to the vessels of the spermatic cord would effectually, I believe, produce atrophy of the testes, and the operation is not increased in gravity. It might be advisable to apply the ligatures at intervals of time.

The gradual disappearance of the sexual function would not disturb the mental condition of the patient, as many realize it from other causes, and the consolation he would derive from the presence of testicles, with relief from suffering, would, I believe, fully compensate. In all cases the patient should be informed of the character of the operation, and what is intended to be accomplished by it. With him should rest the decision. I regard it the duty of the surgeon, however, to urge very earnestly the performance of any operation which will be efficacious in terminating the sufferings, sometimes horrible as they are, of patients suffering from the results of prostatic obstruction.

Dr. Gant's new book on the diseases of the rectum is undergoing a final proof reading, preparatory to being put in press. The plates are already made, and the press work will be begun February 15th. The book is expected to be quite a valuable acquisition to literature on this subject.

PRESIDENT'S ADDRESS.*

DELIVERED BY DR. E. O. PARKER.

President of the Oklahoma Territorial Medical Society.

Ladies and Gentlemen, Members of the Oklahoma Territorial Medical Association :

In taking my seat as President of the Medical Association of the grandest Territory on the face of the earth, I feel that an honor has fallen upon me of which I am scarcely worthy, and puts upon me a task that I am illy prepared to fulfill; for I realize the fact that an abler body of doctors than the members of this society are scarcely found in any state. And to find myself in the position in which you have placed me, is an honor that I fully appreciate. In what I have to say today, I claim no originality, but simply direct your attention to a few points that seem to me to be worthy of consideration.

I suppose it is generally conceded that a medical society exists for the advancement of the professional interests of its members. We believe that this can be done in no other way so well as through a well organized medical society. In all professions there is great benefit derived from a personal contact with each other, and in no profession do we believe this to be more true than in that of medicine. We hope and sincerely believe that every doctor who attends this meeting will go home better satisfied with himself; and with a kinder feeling for the other members of the profession whom he has met here. We do not believe there is a doctor present today who is practicing medicine for no higher reason than to make money. If there is such a one we believe he has surely missed his calling, for there are many ways by which money can be made faster and with less effort.

There are a great many things to be considered by every one who is in active practice of medicine today. There is considerable talk going on at present about the "code," and there is necessarily a difference of opinion as to just what a code should contain. We think the old "Golden Rule" will cover all points as to our actions one towards another, as well as our actions towards our patients. But there are points to be considered which this rule does not cover. One for instance is the means employed to get practice, and another, with whom to consult. As to the first point, a method resorted to by some is, advertising through the secular press. Gentlemen, it is yet true, and we hope that it will ever remain true, that almost every doctor, as well as the laity generally, look upon the profession of medicine as something more sacred than any other business or profession, except perhaps that of the ministry. Seeing that this is true we can easily understand why it is unpopular to advertise. However there is much advertising done that does not seem to conflict with the code that will not bear too close an investigation. For instance, through the super-abundance of medical colleges. We remember not long since of having read in one of the leading daily papers of the country a lengthy illustrated article setting forth the great advantages a certain city possessed as a place to get a medical educa-

*Abstract of an address delivered before the Oklahoma Territorial Medical Society, at Perry, O. T., Nov. 8, 1894.

tion. Of course the article would not have been complete without telling the public, and especially the people who lived in that city and vicinity, and of course depended upon that city for physicians, when in need of medical attendance, just who these very eminent professors were; hence appeared an entire list of the professors of the college. But these are the big men of the profession, and the men who make codes. We are inclined to believe that the only code that will have much effect upon the actions of any one is the one that he carries in his own conscience.

This we think should also, apply to the matter of consultations. We do not believe that in order that a doctor may be considered worthy of a consultation, it is necessary that he should be a graduate of a regular medical college, but that he be an intelligent doctor and practicing medicine in a way that accords with our ideas of true professional dignity.

A matter of much importance that should be considered now, inasmuch as the Territorial Legislature will meet this winter, is what amendments to the laws regulating the practice of medicine and pharmacy are desirable? I do not believe the law we have now is satisfactory to any of the members of the profession. The law seems to be rather ineffective, yet it may be owing more to an indifference on the part of those who have the enforcement of the law in charge, than to any defect in the law itself. We do not believe the law is up to the standard in regard to the qualification of those wishing to practice medicine in the Territory. We are inclined to the belief that the time has come when every one desiring to practice in the Territory should be required to pass an examination regardless of the fact that he may be a graduate of a medical school. And we also believe that none should be admitted to its examination who has not had some college education. Medical colleges are too plentiful and tuition too cheap. There seems to be a craze for establishing medical colleges at present, and believing as we do that many of their graduates will be incompetent, and that Oklahoma wants to keep in the front ranks, we believe that an examination of all is the only efficient way. We would not submit those now practicing in the Territory and who have complied with the law to an examination, but those who may wish to come in after the new law would come into effect.

With regard to the law regulating the practice of pharmacy we believe that every physician who has complied with the law regarding the practice of medicine should be permitted to run a drug store without having to submit to the examination by the Board of Pharmacy. This we believe to be to the interest of a great many communities away from the towns large enough to support a drug store that would justify the employment of a registered pharmacist, but where there is a doctor who could keep a small stock of drugs that would be of great convenience to the community in which it might be located.

Another matter of importance that might be considered is the often asked question "Shall the doctor furnish his own medicine?" Of course upon this point, as upon all others, there is a great difference of opinion. We think it best that he should do so.

The objections that are offered to the doctor keeping his own medicines are

these: It costs money to buy medicine and therefore makes an extra office expense; it takes time to put up the medicine which the busy practitioner cannot afford to spend in that way; and that we owe it to the druggist to give him our patronage in that line.

In answer to the first we will say: That it takes but a few dollars to put in a very nice little stock of medicine, and that you can dispose it at a good profit. And as to the second: It takes but very little time owing to the very convenient forms that medicine is now put up. There are tablets, pills, granules, compressed powders, elixirs and many other forms that are convenient and reliable, and the very busy practitioner could afford to have a student as an office boy that could be of great service in this line. As to the third objection: We cannot see what claim the average druggist has on the physician. The majority of them will prescribe over the counter every opportunity that presents itself. We believe that the interest of our patient should be considered before that of the druggist.

There are many more things that might be mentioned for our consideration but I have already used too much of your valuable time, so thanking you for your attention I leave these thoughts with you.

TYRO-TOXICON POISONING.*

BY C. M. FULTON, M. D., KANSAS CITY, MO.

On December 3rd, 1892, I was called to the family of Mr. McDonald, and found five persons in bed, suffering from symptoms of poisoning, and the two remaining members of the family, Mr. M. and his brother Charlie, feeling badly. All but the latter two presented symptoms of gastro-intestinal irritation with vomiting and purging. The two not affected so severely suffered from headache and lassitude. Upon inquiry, I found that on December 1st, one and a half hours after drinking a cup of coca with milk in it, Mrs. M. was taken sick with a chill and headache, followed by nausea, vomiting and diarrhoea. At 2 P. M. two hours after being fed some milk the baby 14 months old, presented the same symptoms.

At 6 P. M. Charlie drank milk in tea and in two hours he had a chill. He took a large dose of quinine and went to bed and suffered no further inconveniences other than a slight malaise which lasted for a day or two.

Friday afternoon Mrs. M.'s mother, who had been away from home visiting for several days, returned, bringing two friends, Mr. and Mrs. Chapman. At 3 o'clock they drank tea with milk in it. At 6 P. M. they had supper and at 7 o'clock the elder Mrs. McDonald became very sick. She had a hard chill and violent headache, followed immediately with nausea, vomiting and diarrhoea.

Saturday, 2 A. M. (8 hours after supper) Mrs. Chapman became ill with the same symptoms of gastro-intestinal irritation. One hour later Mr. C., presented the same train of symptoms.

*Read before the Kansas City Academy of Medicine.

Saturday, 8 A. M., I was called and found the patients suffering with the symptoms which I have mentioned. In all, seven were affected.

The five patients confined to their beds presented, with slight variations, the same train of symptoms, viz: Initial chill occurred in four patients; nausea and vomiting in five; extreme retching in two; griping in three; purging in six; tenesmus in two; prostration in four; delirium in one; stupor in one; abdomen retracted in all; eyeballs retracted; violent headache in all; pupils slightly dilated in two; cyanosis to a greater or less degree in all. The evacuations consisted first of fecal matter, then became thin and watery and of a very offensive odor. Pulse rapid and weak. Temperature in most sub-normal.

Mouth and throat dry, with white coating which changed to brown in 24 hours.

In one case the symptoms came on in 1½ hours after eating; in two cases two hours; in two, three hours; in one, eight hours, and one nine hours.

The symptoms were such as might be produced by arsenical poisoning, but the time elapsed after eating till the development of the symptoms precluded that theory.

An inspection of the cooking utensils failed to reveal anything, such as corroded vessels which might produce such a condition.

An inquiry as to the kind of food taken, elicited the information that they had partaken of a supper of bread, butter, beefsteak, eggs, milk and tea.

The only article of which all the affected persons partook, was tea containing milk, the milk used at the time was a part of that which had been procured from the milkman the day before, and of which Mrs. M. had partaken shortly before she was taken ill; and the baby also having developed stomach trouble after being fed some of it. I concluded that this article of food was to blame for the disturbance.

Taylor says that from the symptoms alone, it is impossible to do more than merely infer the probability of a poison; because there is no poison which possesses absolutely characteristic symptoms. He also says that the best proof of the nature of a poison is the discovery of the same in the vomited matter and in the urine. The next best proof is the discovery of the poison in the food of which the person has partaken. Fortunately, a portion of the suspected milk remained, which was placed for analysis in the hands of Dr. Hunter, who was then city chemist.

From the symptoms presented by these patients, I suspected tyrotoxin poisoning, but treated them on the expectant plan, giving bismuth, carbolic acid, and lime water, and hypodermic injections of morphia to those who were suffering pain, and aromatic spirits of ammonia and whiskey to relieve prostration, till Dr. Hunter telephoned me that he had found tyrotoxin in the milk; when I prescribed salol and quinine, and for two who seemed more profoundly affected than the others, I prescribed bichloride of mercury in $\frac{1}{12}$ grain doses every four hours.

The patients all recovered after an illness extending over four or five days. The baby, while it was fed a larger quantity of the milk than the

adults, suffered less; although I attribute this to the method of preparing its food by heating it, which probably decomposed the poison to a great extent, as it readily decomposes at 195.8° F. though we are told by Vaughan and others that children are less susceptible to this poison than adults.

Since all putrefaction of organic matter whereby it is converted from an organic to an inorganic state is due to the action of bacteria, it follows that all ptomaines or poisonous alkaloids result from the growth of these micro-organisms.

Cow's milk is an excellent culture medium, and under the influence of certain bacteria undergoes rapid decomposition, producing a nitrogenous body which has been identified as diazobenzen butyrate, and to which Vaughan gave the name of tyrotoxin. It is produced early in the decay of the albumenoid elements, and like all nitrogenous compounds is soon decomposed.

It may exist in any article of food of which milk is a component part. Placed on the tongue it produces a sharp burning sensation, dryness of the mouth and throat, and acting through the nervous system as a systemic emetic and purgative produces the symptoms of a gastro-intestinal irritant, but not the lesions.

It is said that while small doses produce both vomiting and purging, large doses may render both impossible by producing spasm of the involuntary muscles of the alimentary canal. The conditions under which this substance is produced are those which are favorable to decomposition, viz: a high temperature, moisture, and air laden with bacteria from filthy surroundings.

The bacillus butyricus which is an important factor in the production of the ptomaine tyrotoxin, will not grow at a temperature below 75.2° F. The lower temperature does not destroy the organism, but it lies dormant until the conditions are favorable for its growth.

The vessels and the room in which milk is kept should be scrupulously clean; and the milk should be thoroughly cooled before it is transported to customers, and as tyrotoxin is decomposed at 195.8° F., the greatest safeguard against the poison is to sterilize milk. That tyrotoxin is one of the causes of the violent choleraic diarrhoea of children, there can be scarcely a doubt. The symptoms induced by these ptomaines are not to be distinguished from the disease called cholera infantum, and the poison has been found in a sample of milk, a part of which had been given to a child not more than two hours before the first symptoms of a violent attack of this disease.

In conclusion I wish to say a few words about the differential diagnosis between milk poison and meat poison.

In many cases of ptomaine poisoning lacking the so-called characteristic symptoms, it would be in my judgment impossible from the symptoms alone to decide what particular poison produced the results, but there are certain symptoms said to be peculiar to meat poisoning, viz: an increased secretion of saliva and tears and a viscid ropy mucus in the mouth followed later on by a diminution or arrest of secretions, and a puriform exudate on the back of the tongue and pharynx, and certain eye symptoms. Gradle claims that the eye symptoms are of diagnostic significance and result from paralysis of the third

nerve, producing dilatation and immobility of the pupils resembling poisoning by the belladonna group, but lack the cerebral symptoms of the latter, and come on more slowly. Ptosis is also found in some cases of meat poisoning, but not in milk poisoning, but owing to the fact that the eye symptoms are not constant in meat poisoning, the difficulties of diagnosis are increased.

Cyanosis is found in milk poisoning but not in meat poisoning.

A point of much value is the length of time elapsed after eating before the development of the symptoms. The symptoms of milk poisoning come on in one to four hours usually, although they are sometimes delayed as in my cases, one in eight hours and one in nine hours. The symptoms of meat poisoning usually come on in twelve to twenty-one hours, but may be delayed for several days.

In the cases which I report in this paper, I found in nearly all the patients two symptoms present which I have not found reported in any other case of milk poisoning, first, an initial chill which seemed to usher in the attack, and was the first symptom complained of, and I attribute it to the effect of the poison on the nervous system. The other symptom was violent headache.

In the treatment of tyrotoxon poisoning the first step is to destroy the parasite which produces the disease. Give antiseptics, as corrosive sublimate, calomel, carbolic acid, salol, etc. Protoiodide of mercury is said to precipitate this ptomaine and render it inert.

Vaughan is favorable to salicylate of soda as a remedial agent. Second, obviate the effects of the poison. Basing my opinion on the results of the large doses of quinine which two of my patients had taken immediately on the appearance of the initial chill, I am led to believe that this agent is one of the best that can be used in the treatment of these cases, as these two patients were the only ones able to be out of bed, and the unpleasant symptoms were reduced to a minimum.

I believe that it acts as a germicide and also fortifies the nervous system against the poison.

COMMUNICATIONS.

Editor Medical Index.

Dear Doctor:—I have learned that *The Index Medicus* will cease to be published with the February number, owing to lack of support and the fact that a large number of its subscribers are delinquent, unless an effort is made to continue it.

The value of this publication to those who do any work at all in connection with medical literature is so great that I take the liberty of writing to you to express the hope that you will not only become a subscriber, but will urge other of your professional friends to do so.

It is particularly necessary that *The Index Medicus* should be continued owing to the fact that after the completion of the supplementary volume of *The Index Catalogue* of the Surgeon General's Library there will be no record of contemporary medical literature and he who desires to keep pace with it, or who wishes to study a particular subject will have to resort to the laborious

task of seeking in various journals that which he desires if the publication of *The Index Medicus* ceases.

It will be possible to continue *The Index Medicus* if 500 new subscribers are obtained. The subscription price is \$10 per annum which should be sent to Mr. George S. Davis, publisher of *The Index Medicus*, Box 470, Detroit, Michigan.

As *The Index Medicus* can never be made a success from a commercial point of view because of the peculiar scope of its work, I have no hesitancy in making you acquainted with these facts, and I earnestly hope that you will insert a notice emphasizing the importance of this matter in the columns of your valuable journal.

Yours truly,

H. A. HARE, M. D.

Philadelphia, December 6, 1894.

To the Editor Kansas City Medical Index:

Sir:—We beg to extend to you the compliments of the season. We will start the new year by issuing early in February, a companion book to Dr. R. von Krafft-Ebing's famous treatise, "Psychopathia Sexualis," entitled "Suggestive Therapeutics in Psychopathia Sexualis," it being a translation of the original by Dr. A. Schrenck-Notzing, of Munich, collaborator with Krafft-Ebing. This book will contain about 325 pages and be sold by subscription only, at \$2.50 per volume, in cloth. It will be of the greatest importance as an authoritative work on suggestion as a therapeutic agent in the hands of the intelligent practitioner.

THE F. A. DAVIS CO.

Philadelphia, January 7, 1895.

Editor Index:

Many members of the class 1879, Jefferson Medical College, of Philadelphia, are desirous of having a class reunion on the occasion of the 15th anniversary of their graduation. Owing to changes, comparatively few addresses are known and therefore this means is resorted to, with the hope that every member of the class of 1879 who reads this notice will communicate at once with their class president.

DR. PHILIP R. KOONS.

Mechanicsburg, Cumberland Co., Pennsylvania.

LEPROSY IN ST. LOUIS.

Editor Medical Index:

Thinking the following might be of some interest to your readers I beg leave to submit it.

On December the 7th while at the City Hospital, I saw brought before a class of medical students a patient afflicted with leprosy. The disease and its phases was demonstrated to us by the eminent and talented Dr. Ohmann-Dumesnil.

The leprosy is a mixture of the anæsthetic and hyperæsthetic varieties.

General history of the case. Mr.—aged 62 years; is a native of Illinois; but has traveled extensively. In his ramblings he has visited South America, the West Indies and the Hawaiian Islands. He admits (while in the Indies) of having had intercourse with a woman who had a peculiarly mottled skin, who he now believes to have been a leper. The man when admitted to the hospital was suffering with extensive burns on the dorsal surface of both forearms, extending from the wrist joint to the bend of the elbow and covering the whole of the posterior surface of the arms between these points.

The burns were received while leaning upon a heated register, the man not being aware of the burning process (so completely anæsthetized was the integument in these regions) until his attention was called by the smoke arising from it.

Since the patient has been under the care of competent men, the raw surfaces, which as I have said covers the whole of the posterior surface of the arms has been rapidly healing. This process of healing is in fact one of the peculiarities of the disease.

Leprosy according to the majority of latest writers is not that exceedingly contagious disease which it has been supposed to be, but it is with the utmost difficulty that it can be inoculated into the human system—and not at all excepting through an intermediate host.

EMMET PERDUE.

1542 Lafayette Ave., St. Louis, Dec. 9, '94.

EDITORIAL.

THE DEATH OF DR. MATHEW W. HALL.

One by one the land marks of the medical profession of former years are dropping away. Among the last we note the death of the noted and venerable Dr. Mathew W. Hall, aged 77 years, who died quite suddenly at the residence of his son, the Hon. Mat. W. Hall, Jr., near Marshall, Saline Co., November 19th, 1894.

The Doctor has been a prominent figure in medical circles of the State of Missouri all his life. He received his literary and professional education at the Transylvania University, at Lexington, Ky., and for fifty years has been recognized as a fine physician and a perfect gentleman. He belonged to that class of men now, unfortunately, rapidly disappearing, who considered their profession before themselves, and their honor rather than their riches. He had been a member of the Presbyterian church, and a member in good standing of Arrow Rock lodge, A. F. & A. M., for forty-eight years. In 1870 the St. Louis Medical College conferred upon him the degree of Ad Eundem. He represented Saline County in the legislature in 1860, and again in 1872. He made a satisfactory representative for his constituents, who were all his personal friends. No citizen ever died in Saline County more widely known or more heartily respected; and probably no physician whose residence lay in the smaller towns outside of the great medical centers, was so widely known and recognized away from home.

He was the father of Dr. C. Lester Hall, President of the Kansas City Academy of Medicine; of Dr. Jno. Hall, of Marshall, Mo.; Ewing W. Hall, of Kansas City, and Dr. Thomas B. Hall, of Saline County.

At the regular meeting of the Saline County Medical Society, held December 4, 1894, Dr. M. T. Chastain delivered a most eloquent address, in the course of which he said, "The Golden bowl is broken, the silver cord is loosened and the pitcher lies broken at the fountain. It is not my province or my duty to pronounce his eulogy, if it were, and he had known it he would have said as Cromwell said to his artist, 'Paint me just as I am.'"

His biography has been written in heart drops, by a more deft hand, a more experienced brain. On November 19th last, Dr. M. W. Hall, laid himself down to sleep the 'unbroken slumber that steals over all the sunset of life's closing day;' his sun of life went down as peacefully as ends a summer evening. The tribute paid to his name and worth at his home by his friends and neighbors fitly attest the esteem in which he was held by all, and proves how deeply he was mourned. * * * * * Dr. Hall had been a man of powerful frame and wonderful physical endurance, indomitable will, and splendidly equipped mental faculties. During his long and eventful life, he sacrificed them all for the sake of humanity. 'He lived in deeds not years, in thought, in beauty, in feelings and not in figures on a dial.' The care, anxiety, broken rest and exposure of our profession, makes life rather short and hazardous. We who are here to-night remember that this is he who rendered large and important service to mankind as a physician. Three quarters of a century is a long golden span of life, and this ardent lover of humanity made it rich in deeds rather than in years, by his untiring efforts to help mankind. It is a beautiful closing of a beautiful existence, and the world is poorer by the loss of one of the choicest souls that this utilitarian age has produced."

His death though sudden was not entirely unexpected as his health had been somewhat feeble for some months past. However, he was well enough on the day before his death to attend church at Napton, and appeared quite as well as usual. That afternoon, however, he was attacked by a sudden illness and never recovered.

He was buried with masonic honors in Ridge Park cemetery, at Marshall, Missouri.

At the close of a life so successful, so complete, so grandly accomplished, so triumphantly and peacefully laid down it would almost seem out of place to offer sympathy or condolence to the friends left behind, for it is simply the triumphant closing of a perfect career. The gavel of the Master has fallen, and our brother has passed from labor to refreshment.

EDITORIAL NOTES.

THE ANNUAL BANQUET FOR THE ACADEMY OF MEDICINE FOR 1895.--One of the merriest events of the year in medical circles in Kansas City, is the annual banquet of the Academy of Medicine, which is held at the Midland Hotel each year. The banquet of 1895 was held January 8th; the grand march beginning at 9:30 and supper served at 9:40

To begin with, the music was good—excellent, being furnished by Zimmerschied's Orchestra. Next, as is always the case with the Midland, the viands were perfect; and of course when the company consisted of the Academy of Medicine and its invited guests, the company was as good as the viands.

An especially notable number on the musical programme was a clarinet solo by William Rose, while the rendering of "Old Kentucky Home" also called forth loud and prolonged applause. As the banquet progressed, the general good spirit of the company rose, and mirth and laughter prevailed.

The grace and beauty of the toast master, Dr. Punton, was such that most of the floral decorations on the table were soon placed in front of him. At 11:15 the gavel rapped to announce a telegram from one of the founders of the Academy, Dr. Parker, of St. Louis, who sent his congratulations upon the occasion.

Then followed the toasts. First, "Our Founders," by Dr. Charles F. Wainright. We should be glad, indeed, to reproduce all the toasts of that memorable evening, but space and time forbid; however, we give Dr. Wainright's response, as it is brim full of information concerning the origin and growth of the Academy:

"The founders of the Academy were young men physically, and mentally strong and energetic; they were men with but a single purpose, determined to succeed, to accomplish more in life by union of their strength than could possibly be attained singly; They were careful men, and after surveying the field and realizing the need of another society in this city, they slowly and carefully arranged their plans. It is necessary to say that they met with many difficulties and like the small yacht launched upon the great sea, soon met with a rough tide and many breakers, so great as to threaten the little barge and to cause some of the crew to forsake her.

The first difficulty experienced was in securing a name, and strange to say, after several weeks controversy, the only name that could have made this society what it is tonight, was chosen.

Comparing the early organization of this society with the small yacht, it will be interesting to mention some of the crew. Our captain was Dr. H. C. Crowell, large and portly, zealous and energetic, who would become a little uneasy, like Columbus, when there was no land in sight, and would at times threaten to commit suicide, or become so despondent as to render him unable to see any hope of prosperity. He is today the celebrated gynaecologist of the west, the Marion Simms of this Academy.

Our pilot was that steady, level headed, strong minded fellow, Dr. H. S. Douglass, who stood constantly at the helm, look far out into the future, making the voyage safe and providing for all danger. Let us reflect for a moment with sadness on his life and appreciate the fact that this society is a living monument erected to his memory.

Dr. J. P. Parker, now of St. Louis, acted as a stern old mate, doing active service himself and urging others to work.

Dr. Van Swearengen, now of Ft. Wayne, Ind., was chief clerk and rendered valuable assistance.

Dr. John Punton, then a roustabout, was afterwards ship inspector, and has since been appointed to the position of captain. He was constantly looking to the masts (not the masses) and the rigging of the ship, offering valuable suggestions as to what attitude we should assume towards the public, laboring under the delusion that the Great Physician had selected him for special service in enlightening the masses. Labor has its reward and tonight he enjoys the highest honor that could be bestowed upon him, having been made president of this society.

Let us be thankful tonight for what we have accomplished and press on with time, watching the growth of our Academy, and like the plant by the wayside shedding forth its fragrance and beauty, unfold our volumes of knowledge and scientific productions to the world"

The other toasts were as follows: "Our Function—The Advancement of Scientific Medicine," Dr. Hal Foster; "Our Fellows—The Salt of the Earth," Dr. S. G. Gant; "Our Motto:—Fraternity, Progress," Dr. C. B. Hardin; "Our Aim—Kansas City, the Medical Center of the West," Dr. Rob't T. Sloan; "Our Work of 1894," Dr. Jno. W. Kyger; "Our Guests," Dr. J. A. Horrigan; "Our Host—The Midland Hotel," Dr. C. A. Ritter; "After the Ball is Over—The Post-Academic," Dr. B. H. Zwart. Interspersed among these were the following impromptu responses: "The Coming Member," Drs. Rathbone and Ball; "The Prairie Doctor," Dr. Axtel, of Newton, Kansas; "Our Founders," Dr. W. F. Kuhn; "Our Sister Society—The Jackson County Medical," Dr. Joseph

Sharp; "Our Neighbor—The State of Kansas," Drs. Ward and McClintock; "The Medical Press," Dr. H. E. Peaise, of the KANSAS CITY MEDICAL INDEX and Dr. W. C. Boteller, of the *North American Medical Review*; "Our Sister City, St. Joe," Dr. Wallace, of St. Joe, Mo., and several others whose names and responses we do not at present recollect and just why it is not necessary to say. Mirth ruled the hour. Dr. Binnie masqueraded in the disguise of a "Bald Headed Man." A rumor flew about the room to the effect that the toast master, Dr. Punton had eaten up one of the palm trees; but Dr. Ward, of Topeka, who sat near him at once contradicted it.

Abundant good wishes were showered upon the Academy and continued success predicted for it. Its growth has certainly been remarkable, and its position to-day is one to be envied. The banquet was enjoyed by nearly one hundred doctors.

And not until three o'clock the following morning did they arise from the tables, and with three cheers for their host, adjourn for another year.

A NEW HOSPITAL.—Topeka promises to become the medical Mecca of the west, not only for patients, but for students. There is already established a thriving medical college with over sixty students and the new Santa Fe hospital, which will be one of the finest in the country anywhere, is in course of construction. Today the Capital takes pleasure in announcing a third institution of the same nature that will have the double purpose of being a hospital for woman and a training school for woman nurses.

About two months ago the plans for the new enterprise were laid before Mrs. Dr. Stormont by Dr. M. B. Ward, who is the father of the movement. Mrs. Stormont was favorably impressed with the idea of establishing a women's hospital in Topeka and after consulting with a number of her friends this generous woman, whose munificence has been the subject of much praise in this city and the state before now, decided to encourage the movement by donating \$10,000 to assist in the purchase of a site and the erection of a building.

The result is that yesterday a charter was filed for the "Jane C. Stormont Hospital and Training School for Nurses." The purposes for which the corporation is formed are: First—To establish and maintain a hospital for the medical and surgical treatment of women. Second—For the training of young women as nurses for the sick. Third to procure such real estate, monies, rights and credits either by purchase, gift, grant or devise, as may be deemed advisable in carrying out the purposes for which the corporation was formed. The charter is a perpetual one and the business of the corporation is to be transacted at or near Topeka.

Under the provisions of the act of incorporation, five trustees have been appointed for life, vacancies caused by death or removal from the state to be filled by the board. It is as follows: Johnathan Thomas, president; Dr. M. B. Ward, secretary; John R. Mulvane, Dr. C. A. McGuire and P. I. Bonebrake.

Mrs. Stormont has already turned over to this board her liberal gift of \$10,000 and the hospital building will be erected as soon as suitable lots can be secured, the plans selected and the contract let. It is the intention of the board to put up a building of modern architecture and containing every modern improvement. It will probably be constructed of pressed brick and will be located on the most desirable and beautiful spot that can be secured in the city. The board intends to purchase not less than four lots, so as to give room for an enlargement in the future.

The by-laws provide for the election of a staff of not less than seven physicians, who shall have complete control and management of the hospital and patients. At the last meeting the board of trustees elected the following nine gentlemen to serve on this staff for the first year: Dr. C. A. McGuire, Dr. H. L. Munn, Dr. L. Y. Grubbs, Dr. George W. Hogeboom, Dr. G. J. Mulvane, Dr. C. H. Guilbor, Dr. G. A. Wall, Dr. L. M. Powell and Dr. M. B. Ward.

At its next meeting the board will elect a chief of staff and a first and second assistant. The object of this large staff of physicians is to give patients the opportunity to

call in specialists in every branch of medicine, and also to enable the hospital to graduate nurses who will be prepared to meet any emergency in the line of trained nurses.

The hospital is expected to be self-sustaining, although to a certain extent charity patients will be admitted.

At the next meeting of the trustees an auxiliary board will be elected in accordance with the by-laws, consisting of five ladies, to whom will be referred patients who are unable to pay the hospital fees, for recommendation or rejection.

As soon as the building is completed Dr. Ward intends to turn over all his interests, abandon his hospital and give his entire support to the new institution.—*Topeka (Kas.) Daily Capital.*

THE FAMILY DOCTOR.

When I git to musin' deeply
'Bout them times what used to be,
An' the swellin' tide o' memory
Comes a sweepin' over me.
Then among the wrecks o' long ago
That's driftin' on the crags,
I can see our fam'ly doctor
With his leather saddle-bags;
With his crown so bare an' shiny
An' his whiskers white as snow,
With his nose jest like a piney
That's beginnin' fer to blow—
Fer he painted it with somethin'
From his bottles 'or his kags,
That he alluz carried with 'im
In his rusty saddle-bags.

When the whoopin' cough was ragin'
'R the measles was aroun',
Then he'd mount his rhubarb pony
An' go trottin' out o' town;
With his saddle-skirts a floppin'
An' his laigin's all in rags,
An' the roots an' herbs a stuffin'
Out his pussy saddle-bags.
Then when Mam was down with fever
An' we thought that she'd die,
That ol' feller didn't leave 'er
An' he never shut an eye;
But he set there like a pilot
Fer to keep 'er from the snags,
An' he brought 'er through the raffle
With his musty saddle-bags.

I can see 'im with his glasses
Set a straddle of his nose.
With his broad-rimmed loppy beaver
An' his loose, ol'-fashioned clo'es;
I can see 'im tyin' at the gate
The laziest o' nags,
An' come puffin' up the pathway
With his heavy saddle-bags
But he started on his travels,
Many, many years ago,
Fer the place where life unravels
An' dividin' waters flow;
So I hope he's reached the haven
Where no anchor ever drags,
An' has landed safe in heaven,
With his shinin' saddle-bags.

—*Columbus Medical Journal, Oct. '94.*

BOOK TALK.

HOME TREATMENT OF CATARRHS AND COLDS.

THE HOME TREATMENT FOR CATARRHS AND COLDS. By Leonard A. Dessar, M. D., Visiting Laryngologist to St. Mark's Hospital, Mt. Sinai Free Dispensary, etc., etc. Published by the Home Series Publishing Co., 114 Fifth Ave. New York. P. O. box 1406. 12mo. Cloth. 116 pages well illustrated. Price \$1.25.

The aim of this little work is to supply the laity, vocalists, public speakers, etc. with such information regarding diseases of the nose, throat and ear, as will enable them to take proper hygienic measures for their protection. It suggests simple methods of treatment adapted for the use of the household. The author has not intended to supplant the physician, but has aimed to afford his readers a full and intelligent guide for home treatment, for the more trivial affections of the nose and throat. A few points in the book are certainly most commendable, and make it an interesting publication. Few physicians however, would care to follow the treatment of ear ache by applying leeches to the face, (page 111) a procedure which few would care to recommend. However, the work is of value, and one which any physician could recommend to families desiring such a work.

THE PRINCIPLES OF SURGERY AND SURGICAL PATHOLOGY.

THE PRINCIPLES OF SURGERY AND PATHOLOGY. By Herman Tillmans, M. D., Professor of Surgical Pathology of Leipzig University. Translated from the third German edition by John Rogers, M. D., New York, and Benjamin Tilton, M.D., of New York, edited by Louis A. Stimson, Professor of Surgery in the University of the City of New York. 800 pages. Cloth \$5.00, leather \$6.00. D. Appleton & Co., New York. 1894.

This is one of the finest works on the principles of Surgery that has appeared in the English language. Section first treats of the general principles governing surgical operations and the preparation for them, and the various kinds of instruments and methods of using them, and is the most complete section on this subject that has ever appeared. The second section is devoted to the consideration of surgical dressings, their application and preparation; and the third, to surgical pathology, and the therapy and care of cases after operation. It is profusely illustrated, having nearly 400 illustrations which are remarkable for their clearness, and which in most cases are new. Any one contemplating the purchase of a work on the principles of surgery can not afford to ignore this new work. Its sale has been phenomenal; it is not saying too much to say that it should stand at the head of American works, on the Principles of Surgery, and the reception accorded it and the endorsement given it by our surgeons is such as to warrant any doctor in quoting it as standard authority in its line.

A MANUAL OF DIAGNOSTIC NEUROLOGY.

A MANUAL OF DIAGNOSTIC NEUROLOGY: FOR GENERAL PRACTITIONERS AND STUDENTS By Alexander B. Shaw, M. D., St. Louis, Mo., Professor of Diseases of the Mind and Nervous System, and of Clinical Neurology, Beaumont Hospital Medical College, Consulting Neurologist to the Baptist, Alexian Brothers, City and Female Hospitals, City Insane Asylum, etc. Cloth. 8vo.. 115 pages, well printed on heavy book paper, and finely illustrated with original engravings. From press of S. G. Burnham, St. Louis. 1894. Price \$1.60.

This work has been "built upon new lines," each symptom has been discussed separately, and the individuals have been grouped into the symptom complex diagnostic of various diseased conditions. The photo engravings are an exceptionally noticeable feature and assist materially in the elucidation of the subject matter. The paragraphs are well marked, the definitions clear and concise, and diagnostic points of positive value well brought out.

We welcome the book as a valued contribution from one well qualified to contribute to the current literature of this subject and we feel sure it will let light shine from the author's wide experience upon paths that are dark to many.

A TREATISE ON DIPHThERIA.

A TREATISE ON DIPHThERIA. By Dr. H. Bourges. Translated by E. P. Hurd, M. D., Professor of Pathology in the College of Physicians and Surgeons, Boston, Mass. Physician to the Newburyport Hospital, etc. etc. Paper covers. 172 pages. Bound in the form of the Leisure Library series. Geo. S. Davis, Detroit, Mich. 1894.

This little volume treats of the management of Diphtheria along previously known lines and does not touch upon the antitoxine methods. It is complete in its chapters on the pathology and etiology of the disease and satisfactory in the discussion of diagnosis and treatment. It is entertaining in style and finished in composition as are all these excellent little books.

LANDMARKS IN GYNECOLOGY.

LANDMARKS IN GYNECOLOGY. By F. Byron Robinson, B. S., M. D., Chicago. Paper. 2 vols. 220 pages, bound in the form of the Leisure Library Series. Price 25 cents per volume. Geo. S. Davis, Detroit, Mich., 1894.

Dr. Robinson in his usual original style considers six "Landmarks" in Gynecology. The first, anatomy. The second, menstruation. The third, labor. The fourth, abortion. These comprise the first volume and in the second, the fifth landmark—gonorrhea as a factor in puerperal fever, in sterility, its prophylaxis and its treatment—is thoroughly discussed. The sixth landmark is "tumors." The work is clear, concise, in a word characteristic of its gifted and energetic author.

SMALL HOSPITALS, THEIR ESTABLISHMENT AND MAINTENANCE.

SMALL HOSPITALS, THEIR ESTABLISHMENT AND MAINTENANCE. By A. Worcester, A. M., M. D. With suggestions for hospital architecture and plans for a small hospital. By William Atkinson, architect. Cloth. 12mo. 114 pages, and nine engraved plates. New York, John Wiley & Sons, 53 East 10th St. 1894. Price \$1.25

This little book is valuable to any person, a physician in particular, who desires information concerning hospitals and their management. It shows what can be done with material at hand in any town as well as in the larger cities. Its information is valuable on the subjects of nurse's homes and schools. We can recommend it cordially as concise and practical.

THE POCKET ANATOMIST.

THE POCKET ANATOMIST. By C. Henri Leonard, A. M., M. D., Professor of Gynecology, Detroit College of Medicine. Leather, flexible, 300 pages, 195 illustrations, postpaid \$1.00. The Illustrated Medical Journal Co., Detroit, Mich.

The eighteenth edition of this very popular book makes its appearance printed upon very thin paper, so as to be flexible and handy for the pocket. All the illustrations are photographed from Gray. Its completeness and brevity commend it. However the thinness of the paper allows the illustrations to show through thus blurring the type somewhat. It is the best illustrated little anatomy published, which accounts for its popularity and large sale.

MISCELLANEOUS BOOKS.

DAVID OF JUNIPER GULCH.

DAVID OF JUNIPER GULCH. A novel, by Mrs. L. H. Shuey, paper 415 pages. Laird & Lee, Chicago, 1894.

This is a California story of more than ordinary interest. The author has breathed

mountain air, has taught school and ridden horseback or she could never have given such touches of true nature as appear in the chapters "The Teacher's Examination" "David's Plotting" and "Cherry Valley."

The opening chapters, the seduction of "Sis Beverly" are not up to the balance of the book either in tone, plot or descriptive power, and the gossiping village of Hardup hardly meets our ideal of a California village, yet the book is full of true sketches of that great state and its open hearted people and the author has reproduced some scenes in a masterly fashion,

LITERARY NOTES.

P. Blakiston, Son & Co., medical publishers, have sent in their list of new books issued since April 1st, 1894. Send for it, (mentioning the INDEX) if you desire to know what is new in book lines. Messrs. Blakiston, Son & Co., are also the publishers of Norris' most excellent text-book on anatomy, which is rapidly winning its way into favor with all teachers on account of its clear style and complete illustrations.

The report of the Strike Commission on the recent labor troubles in Chicago has attracted much attention and criticism, but the most scathing denunciation of it which has yet appeared has been written for the January *Forum*, by Mr. Harry Perry Robinson, editor of the "Railway Age," under the title of "The Humiliating Report of the Strike Commission." Mr. Robinson reviews the events of the late strike and points out the many misstatements and inaccuracies contained in the report.

E. B. Treat, Publisher, also has in press the following books, which will be issued early early in 1895: *The Practice of Medicine. A Synopsis of; comprising an embodiment of the late "Systems" and Cyclopedias.* By Wm. B. Stewart, M. D., of Philadelphia. 433 pages. \$2.75. *Diseases of the Nose and Throat.* By Watson Williams, M. D., London. Colored plates. \$2.75. *Legal Medicine, Hamilton's System of; Assisted by thirty Medical and Legal Collaborators,* is announced as now ready. Complete in two volumes, \$5.50 each.

The Forum Library for January (published quarterly) contains eleven interesting and instructive articles on *The Pay of the Professions, and The Professions as Careers—Literature as a Career, Walter Besant; Journalism as a Career, J. W. Keller; Politics as a Career, Ex-Senator Geo. F. Edmonds; Pay and Rank of Journalists, Capt. Henry King; Pay of College Professors, President Harper; Pay of Doctors, Geo. F. Shrady; Incomes of Professional Classes in England, Price Collier; The Stage as a Career; Medicine as a Career, and others.* (25 cts.)

The Annals of Surgery presents five original articles upon surgical topics for its January number. All of standard surgical value and interest. Under the *Proceedings of the Surgical Section of the College of Physicians of Philadelphia, cases of Gunshot Wounds of the Abdomen, are reported by LeConte, Morten and Steinbach.* "Surgical Progresses" gives 20 pages of the best of current literature. *The Annals* is our national surgical journal and we are proud of it.

Published by the University of Press, Philadelphia, Penna. \$5.00 per year. Single copies 50 cents.

E. B. Treat, Publisher, New York, has in press for early publication the 1895 International Medical Annual, being the thirteenth yearly issue of this eminently useful work. Since the first issue of this one volume reference work, each year has witnessed marked improvements; and the prospectus of the forthcoming volume gives promise that it will surpass any of its predecessors. It will be the conjoint authorship of thirty-eight distinguished contributors and specialists, from America, England and the Continent. It will contain the progress of Medical Science in all parts of the world, together with a large number of original articles and reviews by authors on subjects

with which their scientific reputation is identified. In short, the design of the book is to bring the Practitioner into direct communication with those who are advancing the Science of Medicine, so he may be furnished with all that is worthy of preservation, as reliable aids in his daily work. Illustrations in black and colors will be freely used in elucidating the text. A most useful investment for the medical practitioner. The price remains the same as heretofore, \$2.75.

The complete novel in the January issue of *Lippincott's* is "The Waits of Fighting Rocks," by Captain Charles McIlvaine. The scene is laid in the mountains of West Virginia, and the tale is one of adventure, love, and jealousy among the mountainers. "By Telephone," a stirring newspaper story by Francis C. Regal, shows how a plucky reporter defeated a conspiracy and brought the criminals to justice. "A Question of Responsibility," by Imogen Clark, deals with delicacy vs. life-saving in a lodging house. The other stories belong to Christmas, and are offered at the right time instead of a month beforehand, as is the usual magazine custom. These are "Mrs. Santa Claus," by Marjorie Richardson, "A Prodigal Friend," by S. Elgar Benet, and "Mrs. Risley's Christmas Dinner," by Ella Higginson. Each of them is in the spirit of the season, though the last is in a minor key. "Christmas Customs and Superstitions" are collected by Elizabeth Ferguson Seat. Edgar Fawcett recalls "New Year's Days in Old New York," and Edith Duff "Empress Josephine's Happy Days," ninety years ago. In "The Ducks of the Chesapeake" Calvin Dill Wilson tells all about the canvas-back before he is shot and after. Gilbert Parker offers a study of "Herbert Beerbohm Tree," the actor. F. M. B., in "With the Autocrat," recalls some notable private utterances of Dr. Holmes, and M. Kaufman discusses "Society Novels." The poetry of the number is by M. S. Paden, Alice Brown, Kathleen Wheeler, and Susie M. Best.

LITTLE ITEMS.

Dr. M. J. Duncan, of Pleasantville, Iowa, has located at Norman.

Dr. A. B. Scott, has been appointed assistant City Physician for Kansas City.

Dr. Charles Gilbert Chaddock, of St. Louis, has been appointed associate editor of the *Medical Mirror*.

Dr. J. L. Green has moved from Minturn, Colo., to Palisade, Colo. The Doctor has been the surgeon of the D. & R. G. road at that point.

Dr. John Wilson, who has been for many years Medical Examiner for the New York Life Insurance Co., has moved his office from the New York Life Building to rooms 504 and 505 Hall Building, where he can be found by any of his many friends. The Doctor still holds his chair as Professor of Hygiene in the University.

Dr. Mullens shot and killed William Blake at Arvonja, six miles southeast of Reading, Kansas, December 27, about 5 o'clock. The trouble occurred over some trivial matter. Blake had lived at Arvonja for several years. Dr. Mullens is a young physician of Leba. H declares that he shot in self-defense.

Dr. J. Edward Mace, Agent of the Maltine Mfg. Co., has been interviewing the doctors on the subject of Maltine and Coca Wine, and as he carries his samples with him, his visits are looked forward to with pleasure, and we can say from experience, that if all agents and representatives were like Dr. Mace, we should keep the latch string out all the time.

The Indian Territory Medical Association held its semi-annual meeting at Waggoner, Indian Territory, on Tuesday and Wednesday, December 11 and 12, 1894, under the direction of M. C. Marrs, M. D., President, and J. G. Rucker, M. D., Secretary. The meeting was well attended, and a number of excellent papers were read and discussed, most of which are now on our table for future publication in the *INDEX*. The meetings of this association are always well attended and are fully up to the standard of meetings held in more favored localities, as the papers presented from time to time in the *INDEX* will show.

Dr. A. H. Cordier recently operated in Western Kansas upon a case that presented the rare complication of appendicitis and obstruction of the gall ducts. The appendix was ulcerated in two places, and a severe case of peritonitis was in progress, with death threatened at the time of the operation. After removing the appendix, the gall bladder complication was discovered and corrected.

The review of "Tillman's Surgery" will interest every reader of the INDEX this month. It is a book far above the average, and will prove an invaluable companion to every doctor in his surgical work. The agent, Mr. W. R. Ehler, reports an unusually large sale in Kansas City and vicinity. Mr. Ehler has represented D. Appleton & Co. for a number of years, and is very enthusiastic over this work.

Physicians who have the ability to write fiction that is not sensational or sermonizing, but is of a fine, high moral tone will now have an opportunity to do so. We would like to see Kansas and Missouri practitioners win some of the eleven prizes offered by the Youth's Companion. They range from \$100 to \$500 each. These stories will be received until March 1st, and the writer *must* be a physician.

The semi-centennial of the discovery of anæsthesia was celebrated December 27, at Young's hotel, Boston, by the Harvard Odontological society. After dinner Prof. Charles Brackett, of Harvard, read a paper on the introduction and use of anæsthesia, which was afterwards discussed by the members. Among the invited guests were the Rev. Alexander McKenzie of Cambridge, Dr. C. F. Withington, of Boston, Dr. Taylor of Hartford and Profs. Fillebrown and Brackett of Harvard.

The University Medical College, of Kansas City, Mo., has elected as trustees to the University the following eight men in addition to the trustees previously existing: Drs. Fryer, Halley, Merriman, Gant, Punton, Rosenwald, Wainright and Gayle. This gives a trustee's vote to every member of the teaching faculty. The change in management will be watched with interest, for as a rule it is a mistake to place the executive power in too many hands, but an exception will probably obtain in this case, as the hands are all good ones.

Frederick, Stearns & Co., of Detroit, Michigan, will in 1895, celebrate their 40th anniversary, which makes them one of the oldest established pharmacies in this country. They have sent to each of the physicians of the West a handsome morocco bound memorandum book. If any of our readers have not received one, they should send their name and address to the above named firm. In sending the gift they say, "In a business career of forty years we doubtless may have made mistakes, as no one is infallible, but we have generally been given credit for good intentions, and have endeavored to treat others as we would like to be treated ourselves. In short, we have striven to be honest and sincere in conducting our business and to merit the favor of a discriminating profession. If we have successfully accomplished our aim we shall feel satisfied."

Our readers have noticed in the advertising pages of the INDEX the name of "Merriam Park Lodge," a private home for patients suffering from diseases of the nervous system. We are sorry to report that a short time ago a fire broke out in the building, rapidly got beyond control, and the entire structure burned, the patients being safely removed without accident, hence Merriam Park Lodge is no more. However, with commendable energy, Dr. Sexton and the company backing the enterprise immediately purchased the Coronado Hotel, at Bonner Springs, Kansas, where the facilities for fighting fire are better, and at the present writing are equipping it, and have transferred the patients now on hand to their new quarters. It is probable that the advertisement of their new institution will appear in the place of Merriam Park Lodge in this issue, if not, mail addressed to Dr. Sexton, will be forwarded to the new institution, and cases may be sent with perfect assurance of being well cared for.

Christmas evening Dr. J. A. McKenzie had two urgent calls from patients and desiring to respond immediately, started on his bicycle from the office, despite the snow storm, and had only gone a short distance when his wheel slipped and he was thrown, striking on his left leg. Both bones were broken just above the ankle, producing a very severe fracture. He was carried into Selig's drug store, a carriage was summoned and he was taken to his home. Doctors Koogler, Miller and Fullinwider set the broken limb and he is resting as easily as could be expected. The Doctor usually carries an accident policy, but as it happens, he had let it expire.—*El Dorado Republic*. Dr. J. A. McKenzie is well known throughout southern Kansas, as a practitioner of many years' standing, especially at El Dorado, and is one who has made many friends among the profession. We regret, indeed, to learn of this accident.

Dr. G. O. Coffin, who has charge of the city hospital during the past winter, has been doing some really fine work in the surgical wards of that institution, which is all the more creditable to him as it was somewhat unexpected to the profession of the city. While the doctor has reported no cases, he has, nevertheless, been busy, and has made for himself quite a flattering record.

The Kansas City Medical College will hold a practitioner's course of post-graduate instruction at the College building, commencing Monday, March 18th, and continuing six weeks. For particulars our readers are referred to our advertising pages. The previous courses given by this college have been most successful, and it is expected to make this one by far the best of any they have yet held. This date has been fixed so that the practitioner's attending the course, can also attend the college commencement. During the first three weeks of the course, a special course on practical anatomy, descriptive and surgical, with dissections, will be held in the anatomy room of the college, and will be open to all whether they desire to attend the entire post graduate course or not. It is expected to make this course of particular interest; and physicians desiring to spend a few weeks in dissection and receiving anatomical instruction should write for a place at once, as material will only be arranged for those who have signified their intention to attend. Letters of inquiry concerning the anatomy course should be addressed to Dr. Herman E. Pearce, care of the INDEX, and concerning the regular course to Dr. Joseph Sharp, 1027 Cherry St., Kansas City, Mo.

READING NOTICES.

H. C. Crowell, Kansas City, in *Kansas Med. Journal*, says: In chronic ovaritis, if the cervix is found puffy, enlarged and highly sensitive, the entire infra-vaginal cervix may be penciled over with iodized phenol or the dark *Pinus Canadensis* (Kennedy's).

RUDY'S FILE SUPPOSITORY is guaranteed to cure Files and Constipation, or money refunded. 50 cents per box. Send two stamps for circular and Free Sample to Martin Rudy, Registered Pharmacist, Lancaster, Pa. No postals answered. For sale by all first class druggists everywhere. Woodward, Faxon & Co. and Evans-Gallagher Drug Co., wholesale agents, Kansas City, Mo.

"JUST AS GOOD."—This is the same old story. Somebody is always presenting something which he thinks is just as good as the old and reliable preparation, and probably stating at the same time that the substitute is much preferred. Dr. E. J. Kempf, of Jasper, Ind., under date of November 24, 1894, writes: "you could not induce me, with love or money, to swallow any of those *high falutingly* named compounds represented to be just as good as Antikamnia, then why should I inflict on my patients a punishment which I would not undergo myself?"

W. H. Cunningham, M. D., Butler, Ala., on November 15, writes: I have been using "PAPINE" for about a year. It is not only retained in the most irritable conditions of the stomach but will also control nausea and vomiting with more certainty than any other remedy. Even in acute gastritis it controls the vomiting better than morphine hypodermically. A number of ladies in my practice cannot take morphia on account of nauseating after-effects. The "PAPINE" has never in a single instance produced any unpleasantness. As an anodyne for children (from two months up) it is simply inimitable. Permit me—without solicitation—to express to you my thanks for the production of a remedy so useful and in many instances absolutely indispensable.

Thomas L. Darby, manager of the Victor Consolidated Gold Mining and Milling Company, has just returned from Denver where he has spent the holidays, combining business with pleasure. While in that city he was joined by the president, A. H. Weber and many legal questions effecting the Victor Company were decided and the property is today in a more flattering condition than at any time in its existence. The official broker, F. H. Pettingell, reports great success in disposing of the treasury stock and the Directors are liable to advance it any time. The attractive feature of this stock is the large amount of shares remaining in the treasury, which makes the investment much more advantageous than it would appear upon the face of it. Besides when one comes to investigate the properties and consider their locations it cannot but appeal to the sound judgment of the conservative investor. Cripple Creek will astonish the world in 1895. From all indications it will produce nearly ten millions, which is phenomenal for the size and age of the camp. It has already created many millionaires and the public should educate themselves concerning the greatest gold camp of the 19th century.

Kennedy's Extract of *Pinus Canadensis*, which is now made by the Rio Chemical Co., of St. Louis, has long been known in this country, chiefly from the endorsement it received from the late Dr. Marion Sims, as an efficient astringent and alterative when applied to mucous surfaces. It now seems to be coming into extensive use in England, where many medical men have reported excellent results with it in various catarrhal difficulties.

At this season of the year, when radical and sudden thermal changes are the rule, it becomes of vital interest to the busy practitioner to have in compact, ready form, such approved medicants as meet the analgesic and antithermic requirements of the bulk of his patients. As pertinent we call attention to the following combination tablets: "Antikamnia and Codeine," each containing $4\frac{3}{4}$ gr. antikamnia and $\frac{1}{4}$ gr. codeine, "Antikamnia and Quinine," each containing $2\frac{1}{2}$ gr. antikamnia and $2\frac{1}{2}$ gr. quinine, "Antikamnia and Salol," each containing $2\frac{1}{2}$ gr. antikamnia and $2\frac{1}{2}$ gr. salol, and "Antikamnia, Quinine and Salol, each containing 2 gr. antikamnia, 2 gr. quinine and 1 gr. salol. These together with the well-known "Antikamnia Tablets," of varied sizes, and "Antikamnia Powdered," constitute indispensable factors in the armamentarium of the physician, and are more than ordinarily indicated in present climatic conditions.

We are just in receipt of an exhaustive Monogram of Kola, issued by the Scientific Department of Frederick Stearns & Co., Detroit, Mich., which gives full information regarding the wonderful tonic stimulant properties of this drug, and many interesting facts relating to its growth and the important part it plays in the social intercourse between the natives of Africa, where it is indigenous. Messrs. F. Stearns & Co., were the introducers of Kola nuts to the Medical and Pharmaceutical professions of the United States, being the first to offer the drug for sale in the beginning of the year 1881. They are headquarters for Kola nuts in this country, importing them in the fresh state in immense quantities direct from Africa. Any physician who is desirous of obtaining a sample of the fresh nuts for planting, or a copy of the Monogram on Kola should address their Scientific Department.

PHENACETINE IN TOOTHACHE.—Dr. Graetzer (Therap. Monatsh. Oct. 1894) in several cases of nervous toothache of unusual severity has found the following treatment to be very serviceable.

R Antifebrini 0.25
Phenacetini 0.5

M. ft. pulv. D. t. Dos. No. VI

Sig. One powder three times daily.

An especially satisfactory effect was obtained in a case of pregnancy in the second month. As is well known this form of odontalgia is usually very obstinate. The patient had suffered for three days from violent lancinating pains in the teeth on the left side which had prevented her sleeping for three nights. After administration of the first powder marked relief was experienced, and she enjoyed undisturbed sleep. After the second powder on the following day, the pain disappeared completely, and had not returned at the time of the report, a period of four weeks.

ARISTOL IN NASAL AND PHARYNGEAL CATARRH.—Aristol possesses properties which render it eminently adapted for the treatment of diseases of the nose and throat. It is an active antiseptic, and yet perfectly innocuous, odorless and free from irritating effects upon the delicate mucous membrane of the air passages. It is very light and can therefore be readily insufflated. It is very adhesive and will not therefore be removed by sneezing and coughing. The expectation entertained of the value of Aristol in catarrhal troubles of the throat on the ground of its possession of these desirable properties have been abundantly realized in practice. In simple atrophic rhinitis, ozoena, and rhino-pharyngitis sicca it has effected cures in cases where other remedies proved powerless or afforded only temporary relief. As regards its manner of application Aristol may be insufflated in its original form of a powder, after previous cleansing of the parts, or a solution in one of the lighter petroleum products may be applied by means of a spray. As an antiseptic dry dressing after operations upon the nose and throat it fulfils every indication demanded of such a remedy. A writer in the *N. Y. State Medical Reporter*, August 1894, speaks as follows with regard to this remedy; "Aristol has been found to be a most useful antiseptic in nose treatment and has many things in its favor, chief of which is its lack of unpleasant odor. I use it in solutions with liquid petroleum, then spray it into the nose and naso-pharynx. A favorite formula of some is:

R Aristolgr. xxx.
Benzoanol 1 oz.

M. sig. To be used as spray or for applications with cotton probe."

Wm. E. Lume

KANSAS CITY MEDICAL INDEX,

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FEBRUARY, 1895.

WHOLE No. 182.

ORIGINAL ARTICLES.

SURGICAL TREATMENT OF HEAD INJURIES.*

BY FRANK PARSONS NORBURY, M. D., JACKSONVILLE, ILL.

Professor of Mental and Nervous Diseases, St. Louis College of Physicians and Surgeons; Professor of Cranio-Cerebral Surgery, Woman's Medical College, St. Louis; Lecturer on Psycho-Physics, Illinois College, Jacksonville, Ill.; Secretary of the Tri-State Medical Society (Illinois, Iowa and Missouri); President of the Morgan County Medical Society, of Illinois; Secretary Section of Neurology and Medical Jurisprudence, American Medical Association, 1893.

The neurologist, perhaps, is intruding when he takes up the disease of surgical treatment of head injuries. But if this intrusion will call the attention of the physician to the necessity of a thorough examination of head injuries, however trifling, this apology is sufficient. It is in the line of surgical diagnosis and timely treatments that I wish to speak, and not regarding the technique of brain surgery.

In a paper read before the Mississippi Valley Medical Association, at Cincinnati, in 1892, on "Wounds of the Brain and their Results," I advocated close scrutiny of all wounds, regardless of extent, seat or cause. For it is a fact, and a lamentable fact that the trifling wounds are the ones producing the most serious consequences, surgically speaking, for from them result insanity, epilepsy, imbecility, abscess neuralgias, etc., due to organic changes. The diagnosis of their extent or seat is not always possible, but if the motor region, internal capsule or base is involved, then the lesion may be outlined with almost positive exactness.

While we may give the seat of the injury, it is not always possible to differentiate its nature, i. e., whether contused, lacerated, penetrating or complicated. Contused wounds may exist alone, and are then confined to the cortical areas—but the interior area and nuclei may be bruised, where the forces are severe. Where we have a contused wound we can expect to find more or less laceration of brain tissue, thus interfering with nutrition and causing red softening.

Laceration is always present when concussion is marked and autopsies

*Read before the Eastern Iowa District Medical Society, at Keokuk, Iowa, November 15, 1894.

show that it is more frequent than is ordinarily supposed. In those cases we may find that profuse hæmorrhage is a grave and serious complication ; it may be diagnosed, however, and appropriate ligations made. Horsley's method, the ligation of the common carotid, may answer in such a case, as well as in the ingravescient forms. By far the most frequent wound is the complicated, which is characterized by contusion, laceration, fracture of the skull, one or both plates, with compressure of the brain or concussion.

Another complication may be penetration of foreign substance, such as hair, iron rust, and dirt, or the breaking off of a knife blade in the skull, or the presence of a bullet or other missiles in gun shot wounds.

The seriousness of a brain wound depends on the extent of brain tissue destroyed ; the degree of concussion or compression and the means surgical or otherwise, *early* applied to give relief.

Surgical interference is not justifiable in concussion, nor in compression with associated grave collapse, but where the grave symptoms are not present, in compression, I should not hesitate to advise surgical relief. For early surgical interference prevents suppurative meningitis, relieves compression and wards off the dreaded secondary results, such as epilepsy, perencephalis, imbecility, idiocy, abscess, paralysis, and insanity.

We must not be misled in examining head injuries by letting extra-cranial symptoms guide us in diagnosis, for a clinical study of head injuries will show that the external symptoms have little to do with results. We must depend on other evidences than depression, and especially so, in fractures of the base. Fully 75 per cent. of the fractures are of the basilar type. And in this form, it is the sense interval which is diagnostic ; that is, the patient meets with an accident, is unconscious for a time, then regains consciousness, walks a distance, becomes faint, vomits and again becomes unconscious ; hæmorrhage has resulted and loss of consciousness is due to this. In all such cases trephine and do so early, for as Wyman has shown, we may expect some good resulting. Trephine at the base.

Now we may encounter a fracture, which is a mere pulling apart of the sutures, where no depression exists and no communicable external wound is found. I had such a case two years ago, where it required a cutting down to the bone to find the fracture. It was at the frontal-parietal-temporal junction and for fully three-eighths of an inch bones were separated. Death followed from hæmorrhage occurring on the opposite side of the brain ; there was basilar involvement also. Again we may have fracture where the brain and meninges are uninvolved. I had a case where there was extensive fracture of the vertex of the skull and the meninges were not so much as lacerated, the result was prompt recovery with slight deformity of the skull.

We may hope for reasonable success in complicated fracture when seen early, the bone elevated, wound made aseptic and kept so. Of course there are secondary conditions which even then may occur when the brain is wounded from concussion ; I allude to conditions which are due to those insidious molecular brain changes which sooner or later involve mentality and determines insanity or imbecility.

Penetrating wounds of the brain are of frequent occurrence, bullet wounds being the most frequent. Their severity depends on the locality invaded and the nature of the substance penetrating. The famous crow bar case is an illustration of the destruction which may occur in certain localities with but little functional impairment, it further shows that the brain is tolerant to invasion beyond our greatest belief. There are, of course, certain localities where if a mere spicula of bone penetrate, death or serious paralysis will result; yet I have seen a number of cases of pistol shot wounds of the brain where the injury was not sufficient to cause death and in two cases no serious result whatever followed.

J. W., age 24, paramaniac was a patient in 1892, when I was a physician at the Insane hospital. This patient was taken home on a visit by his mother, and while at home conceived a delusion that he could kill himself and be resurrected at the end of twenty-four hours. (This delusion was in harmony with the delusions previously existing.) To carry out his idea he one day shot himself, in the forehead, the bullet penetrating the skull, passed along the longitudinal fissure (between the hemispheres) severing the longitudinal sinus, and lodged in the region of the tentorium cerebelli. Aside from the loss of consciousness lasting about half an hour and the venous hæmorrhages from laceration of the longitudinal sinus, there was no harm done. He was soon after returned to my care, apparently none the worse for his experiment. He thinks he has carried out his belief regarding resurrection.

Another case of bullet wound occurred in a patient who found his way to the institution, in which he severed the optic nerves at or near the optic chiasm, producing instantaneous blindness. Death followed from suppurative meningitis due to infection of the wound by foreign substance from the bullet. This is a case which shows the necessity of immediate surgical interference and had this wound been drained properly and kept surgically clean, I believe no secondary results would have followed.

While it is true we meet suppurative conditions in other than traumatic or penetrating wounds, it is nevertheless a fact that abscess, suppurative meningitis, etc., frequently follow fracture, and fractures too which give external signs. Take for instance a contused wound of the head where the swelling is great and by the time the physician arrives, the conditions are such, that external evidence of fracture is wanting; there is no marked depression, no apparent deformity and yet, we have in due time an abscess or suppurative meningitis following; now there must have been an opening in the skull somewhere to permit of the ingress of the microbe, for he is there in all his glory. Post-mortem examination will show there was such an opening to meet this possible condition. I say trephine if necessary to make a clean wound—cleanse through the parts. The post-mortem table shows much uncalled for, so-called, conservatism. I believe in conservatism but I also believe in clean wounds.

Now in children we must be careful in our treatment of traumatic cases. While the great majority of head injuries in children are not followed by serious results, it is nevertheless a fact, and which I have seen verified in the Pennsylvania Institute for the Feeble Minded, that traumatism is a factor in the cause of imbecility, 17.5 per cent. of all cases being traumatic.

Arrested development, perencephalus, epilepsy, etc., can spring from these

so-called trifling injuries to the head in children. I am as careful in guarding against falls to my own child as I am in keeping it free from exposure to scarlet fever, measles and such causes of imbecility. The use of forceps in delivery may be sufficient as to inaugurate traumatic head injury*. Monakaw has shown in his studies that the forceps are responsible for a great many cases of perencephalus.

Guard sacredly the head of the child and when an injury has resulted treat it with the consideration to which it is entitled.

Apoplectic cysts often follow blows on the head and lay the foundation for Jacksonian epilepsy. When localizable they can be relieved. When Jacksonian epilepsy develops in an individual, I care not how young or old, other conditions being favorable it is our duty to operate. This must be *done early*. Time is the factor here as well as the lesion, for Jacksonian epilepsy if allowed to go on, soon becomes a well defined chronic epilepsy, requiring prolonged medical care as well as surgical interference. The draining of a cyst, the removal of a spicula of bone, the dislodgement of a clot of blood, following hemorrhage, may mean the curing of the epilepsy. It is at least worth our effort to try.

Insanity results from head injuries. It may follow immediately from the shock or blow, as the primary effect, viz: the violent vibration of the brain, causing suspension of more or less of the functions of the brain.

Next, there may follow the molecular alterations and perversions of function manifested as ordinary psycho-neuroses,—or as traumatic neuroses, or as neurasthenia and finally there may be sub-acute or chronic organic diseases of the brain and sometimes of other parts of the nervous system. In the later and more typical cases, a neurosis is first engendered, and on this basis the resulting insanity or deterioration of mind is formed by further nervous and mental reductions.

In conclusion I would say "success depends on diagnosis" in the treatment of head injuries and the seriousness of an injury depends on the involvement of the brain, and its membranes.

Primary signs can not be relied upon, as a sure sign of the amount of cerebral injury, as many cases ultimately prove fatal which had the primary indications slight or completely absent. Remember to take the precautions to operate before secondary changes ensue.

CONSERVATISM IN TRAUMATIC SURGERY.

BY JABEZ N. JACKSON, A. M., M. D., KANSAS CITY, MO,

Demonstrator of Anatomy University Medical College of Kansas City, Surgeon to University Free Dispensary, All Saints Hospital, Scarritt Hospital, etc.

The expression "Conservatism in Surgery" is one frequently heard from the floors of medical societies, and read in the volumes of medical literature. The evident popularity of the idea coupled with the wide diversity of interpretation given, has made it the cloak to conceal many sins and shortcomings. On the one hand we find ignorance and timidity attempting under its guise

*3.51 per cent. of imbecility is due to forceps delivery.

to excuse their utter failure in meeting the responsibilities devolving upon them. There is a class of doctors who either do not know enough to recognize the necessity of prompt and intelligent surgery, or else in quaking fear of the surgeon's scapel "conservatively" wait, until their patient is dead or a useful member lost. On the other hand we find ambitious recklessness rashly hazarding the very life of its confiding victim under the seductive plea of a "conservative avoidance" of some remotely possible future inconvenience. Many a patient in perfect health, or with at worst but slight annoyance, has found a premature grave under the persuasion of the slashing operator who cares more for the size of his operative record than for the life and happiness of a human being. Here we have the two extremes, chronic surgery and malignantly acute surgery, both masking under the guise of that popular maiden, conservatism,—the north and the south poles, both trying to "line up" on the equator. Is it not time the surgical mariner should stop and take his bearings, that he may safely sail between Scylla and Charybdis?

True conservatism is neither ignorance and timidity, nor recklessness and butchery. It is neither masterly inactivity nor irreverent haste. It concerns itself, not alone with the how, but equally or more with the when and the why. In the language of the immortal Gross, it calls for three faculties; first of all, the "eagle's eye" of clear and intelligent judgment, then the "lion's heart" of prompt and fearless determination, and finally, the "lady's hand" for clean, gentle and dextrous execution.

What the intellect has first approved the will should quickly ordain, and the physical senses, through their trained agencies, may then carry into skilled execution. The true idea of conservatism therefore is to be found neither in an atrophy of intellect and will, nor in an hypertrophy of will and senses, but in the highest development alike of all the surgeon's mental and physical faculties. May I not define conservatism, therefore, to be "the prompt and fearless application of the best knowledge attainable, with the greatest skill possible, for the preservation to the highest degree of first, life, then function and finally form?"

With this preliminary definition of the term, I wish briefly to refer to a few of the general principles underlying conservatism in traumatic surgery, particularly of the extremities. When we consider the nature of the majority of injuries resulting from railway and other machinery accidents, the importance of the subject is one which can scarcely be over-estimated, and nowhere will the surgeon's skill and judgment, in this line, be more fully tested.

So ponderous are the agencies and so momentous the forces which, produce the injuries met with in modern traumatic surgery, that we have but comparatively few simple cases to deal with. Our fractures are usually compound, our dislocations complicated, and our wounds to soft parts extensively contused or lacerated. The question therefore, as to what can be done to preserve life, function and form, and how to do it, becomes one not easy of definite solution. Thanks, however, to modern asepsis and antisepsis, the problem has in late years been greatly simplified by the removal, to a great extent, of the old nightmare of "blood poisoning" and becomes now rather a problem of repair

than one of inflammation. As such, the prime questions underlying a conservative judgment, are those of *tissue and nutrition*.

TISSUE.—Nature, we are aware, has the power of restoring and reproducing tissue within certain limits, and under favorable conditions. The extent to which repair or reproduction may be carried, will depend in large measure, upon the amount of injury done the neighboring, or interested tissues, as well as upon the subsequent nutrition of the parts. It is, however, essential that at least a reasonable amount of unimpaired tissue of the variety to be reproduced, be present to form a sort of skeleton or framework upon which and about which the new tissue may be formed. In some tissues, as in bone, for instance, this amount may be but slight. Manley, of New York, reports a case in which the entire tibia was shelled out, leaving but the periosteum and a layer of bone plaques, and yet the entire tibia was reproduced.

Evidently, however, it will be impossible to reproduce a tissue of which none of the vitalized elements remain. If, for instance, the entire structure of a muscle for some distance be removed, it will be impossible for a new muscle to be reproduced. I am firmly convinced, however, that ere long, under more perfected technique, the operation of tissue transplantation already demonstrated practicable by many reported cases in bone reproduction and skin grafting, will greatly widen the possibilities of conservative surgery. The process of blood clot organization gives promise of still further progress. Even with our present methods, however, the results which may be achieved by intelligent care, are little short of marvelous.

NUTRITION.—But above all other questions in determining the possibility of tissue preservation, is that of nutrition or blood supply.

A slight amount of tissue injury, for instance, complicated by destruction of the blood vessel or vessels from which the nutrition is derived, may lead to disastrous results. Extensive injury of tissue, on the other hand, in which the blood supply is preserved intact, may be inflicted, and yet most remarkable results be obtained.

A case, which I reported before the section on Railway Surgery of the Pan-American Medical Congress in 1893, of severe compound, comminuted fracture of the tibia, with extensive laceration of the neighboring soft parts, and yet with perfect recovery of both form and function of the limb, well illustrated this fact in my own experience. Bearing in mind this and numerous other cases which have occurred in the practice of other surgeons, I feel that I am warranted in saying that with proper skill, patience and judgment upon the surgeon's part, in the subsequent handling of his case, the one great and only *sine qua non* of conservative surgery in this class of cases, is blood supply.

IRRITANTS.—But admitting that we have sufficient unimpaired tissue left and ample blood supply for proper repair, we may yet meet with failure in our efforts if certain conditions are not carefully observed. A few general thoughts therefore on the management of these injuries may not be amiss; I have just said that tissue and blood are the essentials for repair. There are, however, certain elements which may interfere with or absolutely check this

process, and transform the normal process of repair into one of inflammation. I refer to the continued action of irritants. For our present purpose, we may consider but two classes of irritants: (1) the organized animate irritant or germ; (2) the unorganized inanimate irritant, or as generally designated the material irritant. Either of these two classes of irritants remaining present in a wound may produce disastrous results. Their primary removal becomes therefore a matter of first importance. So much has been said in late years, about germs and germicides that I scarcely deem it necessary to say anything concerning the methods of removing germs. All surgeons are, I assume, familiar with the principles and technique of asepsis and antisepsis. I must, however, emphasize in passing, that our execution be measured up to the full standard of our knowledge, and that these well known principles be carried into painstaking practice.

Particularly, however, here do I wish to call attention to the equal necessity of removing material irritation,—filth, foreign matter, etc.,—whose powers of evil disassociated from germ infection have in late years, I fear, been overlooked. This is an element which we must particularly bear in mind in railway surgery, as nearly all our wounds will be found filled with dirt, coal dust, cinders, gravel and every other conceivable form of foreign matter, literally ground into or buried in the tissues. Some of this can perhaps be readily washed away with our irrigating solutions. Much more, firmly imbedded in the tissues themselves must be removed by more radical measures. Where there is much devitalized tissue which must surely perish, the whole mass should be carefully dissected out, thus ridding nature of this dead irritant, which she must otherwise herself throw off. But even in less extensive injuries, a similar procedure is of inestimable importance, and for this purpose I most heartily commend the judicious use of the sharp curette. With it the imbedded dirt, cinders, etc., are scraped out together with shreds of loose dead tissue, and the wound is placed in a good condition for our subsequent dressings. On the same principles it is evident that loose spiculæ of bone, shreds of displaced and dead tissue, and such other irritant matter must likewise be carefully removed.

Let me emphasize the fact that all the antiseptic solutions in existence will not destroy the action of material irritation; nor can the phagocytes ever swallow or digest a "coal mine."

SEPSIS.—One word in conclusion concerning sepsis as a complication in our work. I am well aware that in many cases, despite our best judgment and precaution some dead tissue must be left and some infection is highly probable. Sloughing or abscesses may ensue. Well, what of it? Septicæmia, some will say. Permit me here to remark that I have little fear of septicæmia in an open wound under proper care. It is pus, retained and absorbed that causes systemic poisoning. Pus drained causes no such trouble. I would caution, therefore, that if pus should occur, the cavity be freely and promptly opened and thorough drainage established. If a sloughing process occur, the drainage may be aided by the free use of hot antiseptic fomentations, which will establish an exosmosis, preventing septic absorption, and at the same time hastening the detachment of the slough.

Naturally in all prolonged cases, where the system is heavily taxed to furnish food for repair, the general nutrition must likewise be carefully looked after. Nutritious diet, aided of times by such pharmaceutical preparations as extract of malt, beef, iron and wine, and the various ferruginous tonics, is of prime importance.

Bearing in mind these general principles I have enunciated, I am sure that with reasonable judgment and patience, we can save many mangled extremities for years of usefulness. And let us remember that true conservatism puts life first, then function and finally form.

COD-LIVER OIL: WHAT IS IT?

BY REYNOLD W. WILCOX, M. D., LL. D.,

Professor of Clinical Medicine and Therapeutics at the New York Post-Graduate Medical School and Hospital: Visiting Physician to St. Mark's Hospital.

Ever since 1841, when cod-liver oil was so strongly advocated by Bennet, it has held a prominent place in the confidence of physicians. From this date we find that many and careful studies have been made, so that we may say that its scientific use is of comparatively recent origin, although it has been employed empirically for nearly two hundred years. The chemistry of this subject is by no means, even now, complete, although many analyses have been made, so that at intervals one finds in the literature various hypotheses as to what ingredients this remedy's virtues may be attributed. In spite of discordant theories and the contradictory results of chemical analyses, cod-liver oil is still regarded as a remedy of the highest value in diseases marked by malnutrition, of which pulmonary tuberculosis is the most frequent occasion for its employment.

What then can be said of its composition? Briefly, it is principally, first, olein glyceride (70 per cent.) with variable quantities of stearin, palmitin (nearly 25 per cent.), and myristin glycerides, the latter increasing with the darker color. So far no controversy has arisen beyond the unconfirmed statement of Winckler (1852) that glycerin could not be obtained from cod-liver oil, which he regarded as a whole, containing propyl oxide. Second, iodine, in from 0.0012 (Bird) to 0.004 per cent (de Jongh), its presence first demonstrated by de l'Orme, but even now it is not known in what form it exists. Third, bromine. Fourth, phosphorus: as pre-existent phosphoric acid, 0.0789. Fifth, sulphur. Sixth, biliary acids. Seventh, free acids, calculated as acetic acid, 0.01 to 1.80 per cent. Eighth, gaduin, $C_{26}H_{52}O_6$, identical with morrhuic acid. Ninth, gadic acid (Luck, 1857), deposited from light-brown oil. As to the so-called alkaloids, or definite bases, there is abundant opportunity for criticism. It is remarkable that they are most abundant in the brown oils, and from these is commercially obtained morrhuol, the name applied to an alcoholic extractive derivable from cod-liver oil and of probably indefinite chemical structure.

The physiological properties of the seven alkaloids have been determined by Gautier and Morgues, and as we read the results of these experiments, we cannot but be impressed by the fact that these symptoms are the symptoms of ptomaine poisoning. And when one remembers that the process of manufactur-

ing hitherto employed is such that putrefaction is an important factor in the production of the oil, as anyone will testify who has visited the North Cape, where the stench encountered upon the journey is as prevalent and as repulsive as that found near the menhaden-rendering works of the Atlantic Coast, the impression becomes a certainty. Without doubt, the alkaloids contained in morrhuol are putrefactive or cadaveric alkaloids, and of these amylamin, asellin, dihydrolutidin are assuredly poisonous and are so classified in Gould's table as modified from Vaughan and Novy. Amylamin can also be obtained from horn and from putrid yeast. Murruhin, as is stated above, is probably the latter. That any of these alkaloids are present in cod-liver oil when prepared at the place of the fisheries, by a proper process, it is extremely doubtful. So far as I can learn, no analyses have been made of such cod-liver oil. To assume that morrhuol represents in any way the active therapeutic properties of cod-liver oil, is to assume that cod-liver oil is useful only in the proportion that it is putrefied. My attention having been called to the reports of Lafarge (1885), and later of Germain Sée, I experimented with morrhuol for several months, and finally, convinced of its absolute failure, I abandoned its use. I was so thoroughly positive of its uselessness that the paper of Bouillot did not induce me to repeat my observations. If there are any medical properties in the preparations of the so-called active principles from which oil is removed, or which are removed from the oil, they must be entirely due to the other substances with which they are incorporated. The substitution of active principles in place of crude drugs is praiseworthy, when it is proved that these active principles represent the properties of the drug or possess in themselves definite physiological action. No digitalin, nor digitonin, nor digitoxin, has yet been isolated which fully represents digitalis; why then need we expect that alkaloids shall represent cod-liver oil, even if they arise from its putrefaction?

To what then can we attribute the beneficial action of cod-liver oil in wasting diseases? That cod-liver oil is a food, a food of especial value, because of its peculiar properties. To quote Farquharson: "It has been proved by experiment that animal are more digestible than vegetable oils, and cod-liver oil is most readily assimilated of all. After being emulsified by the pancreatic juice, it comes in contact with the bile, which distinctly increases its power in passing through moist animal membrane; and it is probable also that the biliary principles incorporated in its own structure aid in enabling it to be easily absorbed by the lacteals. Its action in the system is to improve the general constitutional tone, to enliven force and heat, and to aid in supplying those fatty elements which are so essentially requisite for the construction and repair of the tissues. It supplies the fatty matter on which the proper functions of cell growth and development depend, the nuclei in the cells being formed of fat." The free fatty acids contained also aid in emulsification and absorption from the alimentary canal. It improves the nutrition and supplies the fatty ingredients necessary for the growth and repair of the nervous system. It improves the quality of the blood, increasing the number of the red corpuscles, and strengthens the heart muscle. Although the quantity of iodine, bromine and phosphorus is small, so far as their influence goes they are of use. Brunton has

pointed out that, because it nourishes the young epithelial cells of the bronchial mucous membrane, enabling them to grow instead of becoming converted into pus, it is of undoubted efficacy as an expectorant. Thousands of lives would undoubtedly have been saved, had the profession understood that beef tea, as formerly made, containing scarcely more than the soluble extractives, possesses about as much value as a nutrient as urine.

Shall we now go on to administer the extractives of cod-liver oil, cadaveric alkaloids of demonstrated poisonous properties—of which the best that can be said is that one is diaphoretic and diuretic in its action and increases the appetite—and discard the really valuable constituents, which make up the food? A tuberculous patient can generate a sufficient amount of ptomain without any assistance from the physician. It is the prevention of the formation, not elimination, that one seeks in treatment. An analogous procedure would be the administration of beef tea made from putrid meat.

The use of the extractives of cod-liver oil is no new idea. In 1866, an evaporated watery extract, made from the livers in preparing the oil, was used. It soon fell into disuse. Granting that the ptomaines of putrid oil are harmless—which is yet by no means proven, for the quantity in which they have been administered has been too small for any definite conclusion—if there are any remedial properties in the extracts or wines it must be in the substances incorporated with them, but which are better administered separately.

How then shall we describe cod-liver oil? By imulsions, which are heavily charged with mucilage and contain water which favors rancidity? Of all which I have used—and every one which I could obtain has been used in my hospital and dispensary service—but one has been satisfactory, and that only when freshly made. For fourteen years I have used an oil of which the only recommendation it claimed was that it was obtained from fresh livers by cold expression. It was of American origin, and on that account was not obtained from the cod when in as good condition as when off the shores of Norway. As it was, its use was far more satisfactory than that of emulsions or mixtures of whatever sort.

During the past few months I have used with great satisfaction the Improved Lofoton Cod-liver Oil made by Parke, Davis & Company, which is simply an oil obtained on the site of the fisheries from the livers of the fish at the time they are taken from the water. The process of manufacture is carefully carried out so that absolute cleanliness and freshness of the material shall be secured and that no decomposition shall take place. The disagreeable odor and flavor is removed, but no constituent important for its use as a food is taken out. Specimens kept for months have as yet shown no change. The problem seems to be solved. A food to be of its highest usefulness must be palatable; the most weighty objection is now done away with.

The oil should be given during the height of pancreatic digestion, one to two hours after eating, so that it may pass rapidly through the stomach and be absorbed during intestinal digestion. The stools should be watched that more shall not be administered than can be absorbed. If the oil should "repeat," a fact which I have not as yet observed, a few drops of ether added to the dose is

likely to obviate that difficulty. The dose is from one to six teaspoonfuls. My conclusions are:

1. Cod-liver oil is a food, important because of its peculiar properties.
2. Since it is a food, no extractive can represent its value.
3. The purer the oil—the more free from cadaveric alkaloids—the more palatable will it be and the better adapted for its purpose.
4. The best that can be said of the cadaveric alkaloids, is that they may possibly represent its eliminative, they certainly do not represent its reconstructive, properties.
5. It is not proven that the administration of appreciable quantities of the cadaveric alkaloids is devoid of danger.

A FEW POINTS ON PROFESSIONAL ETHICS OF INTEREST TO THE PROFESSION.*

BY A. L. BLESCH, M. D., GUTHRIE, O. T.

It would seem that an apology is in order in offering a subject of this character to this association. I had hoped that some of the points to be touched upon in this paper would have been discussed during our recent meeting at Guthrie, but unfortunately the paper was not read. Therefore, in glancing over the field of medicine, the present status of things seems to make it imperative that the profession shall notice it. As a profession it has been a matter of pride, as well as principle, that we could point to the "Golden Rule" as the basis of our code of ethics.

We are to be congratulated that an era of scientific advancement has opened a new vista to the eyes of the profession today—there is less groping blindly in the dark, but it is about some incidents in connection with this progression that I wish to call attention. The day of the mystic has about passed away—the chin-whisker period of medical evolution we might be allowed to term it—the Puritanic antetype. Somehow it is with a degree of sadness that we all must recognise that with it has departed some of the high-bred integrity, the true born courtesy that marked above all else the type of the era.

Perhaps it is with medicine as it is with her sister sciences that during the fever period of her most rapid evolution, the man is lost sight of. We will hope that this is but a passing phase in the phenomenon of the evolution of the art of healing as it emerges from the twilight of empiricism into the fuller day. Advancement would be dearly enough bought at the price if we lost the finer essence of fraternity.

Along with the scientific and clothed with its garments, comes much of what we might term as pseudo-science. Skillfully indeed does the proprietary fiend push his wares, through ambiguously worded advertisements. Such, for example as "For physician's use only," "Be careful to prescribe from original packages only," etc. After this manner, making the physician himself a means through which he may hoist his doubtful nostrums upon a better paying public. Many of us seem only too ready to aid him in robbing us of our legitimate

*Read before the Oklahoma Medical Association, at Perry, O. T., 1894.

income in this manner. If this thing continues long at its present rate, the time will be measurable when prescribing will be among the lost arts, and our colleges to keep abreast of the times will have a Professor of Proprieties. In proof hereof, I need only to cite you to any drug store prescription file, where you will find such patents (for really they should be called nothing less) as called for, over the names of our best physicians.

Now the question arises, why prescribe Antikamnia, at a wholesale price of seventy-five cents an ounce, when Acetanolid can be bought at less than that much per pound. It seems like inexcusable waste when our best chemists tell us that Antikamia owes its medicinal virtue to the Acetanolid which it contains. Aside from its ethical aspect, it is certainly wasteful of our patients' means, which during times like these he can badly enough spare. Likewise with Anti-febrin, which chemically is absolutely the same substance as Acetanolid, with the addition of a copyrighted name, but yet, even to this day we will see physicians prescribing Anti-febrin. As to Anti-pyrine and the host of other antis—I see no advantage after careful and pains-taking trial in using them in preference to some article of the same series, upon which no person has placed a private tax, protected by a copyrighted name. I am so constituted that I can not see and differentiate between patenting a compound, or patenting a name. The intention and result amounts to the same thing.

So it is with the long and endless list of these much advertised patent proprieties such as Sennine, Laxamel, Succus Alterans, etc. They possess in no sense any advantage over our usual remedies properly combined, except in the one item of palatability, and it is our own fault if this be the case, for certainly few physicians but could with a little study, make his prescriptions less loathsome in that respect. They do afford a convenient form of administration to the indolent practitioner who does not make the effort to keep himself as well posted as he should. They cultivate a routine habit of prescribing, which the profession is only too prone to fall into at best. If one consults one's own feelings only in prescribing, there is something better, as well as more ethical offered in the fine lines of compressed tablets, alkaloidal granules, etc.

Gentlemen, with the rest of you, I have been more or less guilty along this line, but with the zeal of a newly reformed sinner, I am now preaching against it. In the struggle for existence, keen as present artificial conditions have made it, the shrewd advertiser profiting by the advice of the greatest humbug of all time, reaps his reward in the very face of competent modesty. First of all we have ourselves to blame very largely that this is so, since we frequently give it our professional endorsement. Why is it not possible for us, as physicians, to be as alive to our pecuniary advantage as the legal fraternity are to theirs.

This we can be and yet build on the solid rock of professional intergrity. I will go even further and assert that when my brothers err, it is more than often through a carelessness in this direction than otherwise. Hoping that discussion will be general on this question of the hour, I leave the subject in your hands. [The use of the above named proprietary remedies probably rests upon the fact, that, using them, the prescriber gets results, and uses again. But send in your views gentlemen. The INDEX will hear you all.—Ed.]

COMMUNICATIONS.

DR. BOTELER'S CASE OF "CURED GLIOMA RETINAE."

Editor Medical Index:

Some years ago when Dr. Tiffany reported a case of glioma retinae "cured" by intraocular injection of pyoktanin—violet aniline—it was generally believed that the height of ophthalmic surgery had been attained in Kansas City. But the laurels of Bro. Tiffany, so far as glioma retinae is concerned, have gone glimmering; they now rest upon the brow of Dr. William Clarence Boteler, Professor of the Eye and Ear, in the College of Physicians and Surgeons, of Kansas City, Kan. Not content with confining his work to earthly mortals he has with more than the power of an Annie Besant or Madame Blavatsky, invaded the realms of the spiritual world and operated upon a patient that long since sought bodily repose in the silent tomb.

At least one would infer so from reading the January number of the *North American Medical Review*, and *Annals of Ophthalmology*, the official organ of Professor Boteler. In that journal we find a report of a case of glioma retinae successfully operated upon by this remarkable ophthalmic surgeon, illustrated by pictures showing the patient in different stages of the disease. Reference to KANSAS CITY MEDICAL INDEX, for the year 1893, page 315, November number, shows identically the same picture representing a case operated upon in that year; in which recurrence was reported with death of the patient soon afterward. Careful inspection can leave no doubt as to the identity of the two—hence the inference that the realm of shades has been invaded to add to the truly wonderful achievements of Kansas City's oculists. Perhaps the long post-mortem continuance of this malignant growth is no more phenomenal than the preservation of the string of beads which encircled the neck of the unfortunate child when laid to rest—it still appears upon the "photograph" as distinctly as does the spiritual cancer upon the spiritual body of the unfortunate patient who even death did not spare from the tortures of glioma. Truly such reports will upset current notions of theology as well as of pathology.

Respectfully yours,

St. Louis, February 1st.

EYE OCCULIST.

Editor Medical Index.

Dear Sir:—We have supplied *Diphtheria Antitoxic Serum* continuously since October 16th. During this period we have had supplies of Behring's at frequent intervals, and of Gibier's we have had an ever increasing and constant supply since November 26th. We were the only firm to furnish serum during all this period, and are gratified with the record, having supplied over 2000 vials to date, whereby much suffering and many deaths were undoubtedly prevented.

The purveying of the serum has now reached a commercial basis, as ample supplies are available for all urgent demands. We quote as follows:

Gibier's Antitoxic Serum		Behring's Heilmittel	
In 7 ccm. vials -	at \$1.25 per vial	No. 1. . .	at \$1.90 per vial
In 25 ccm. vials	at 3.00 " "	No. 2. . .	at 3.50 " "
		No. 3. . .	at 5.25 " "

Aronson's Serum is not yet available, but supplies are expected shortly. We will furnish quotation later, on request.

For general information we wish to add, that from our record of sales and importations, we believe that more of the Gibier's Antitoxic Serum has been

used in this country to date than of all other brands combined; and the record of treatment with this serum is so enthusiastic and favorable that it is not excelled by any of the compiled reports from European sources. Gibier's Serum is now in use by a score of Boards of Health, in many hospitals, and by hundreds of physicians all over the country. It is the only product so far regularly prepared in America, and coming from a recognized Institution of the highest standing (The New York Pasteur Institute,) it deserves the preference of the profession in this country.

The only basis on which the various brands can be compared is on immunizing power, and according to this *One vial of Gibier's Antitoxic Serum*, containing 25 immunizing doses, is equivalent to

Six vials Behring's Heilmittel No. 1, containing four immunizing doses.

3½ vials Behring's Heilmittel No. 2, containing seven immunizing doses.

2½ vials Behring's Heilmittel No. 3, containing ten immunizing doses.

We also quote the Pasteur Syringe (piston, 25 ccm. capacity) at \$5.00 each; the Koch's Syringe (bulb, 10 ccm. capacity) at \$3.00 each. We can furnish any of the other syringes variously recommended, such as the Kinyon, Roux, Hotzen, etc. (which are more or less variations of the two favorites above quoted) at regular prices.

Any additional specific information required, will be cheerfully furnished on request, by

Yours very truly,

LEHN & FINK.

New York, January 28, 1895.

TREATMENT OF ACUTE AND CHRONIC ULCERS.

(Published by *Louisville Medical Journal*, August, 1894.)

I have found no class of diseases yielding to treatment with greater reluctance than "old sores," or chronic ulcers. Recently, however, I have adopted a plan of treatment which is quite different from that laid down in the books, and my results have been much better.

Almost without exception, internal, or constitutional, as well as local treatment, is necessary.

The internal treatment should be directed to the seat of the malady, thus eradicating the general pathological condition, eliminating the poisons and disease germs from the system.

To accomplish this object, absolute cleanliness (internal and external), plenty of pure air and sunshine, the religious observance of the laws of hygiene, and a wholesome nutritious diet, are more useful and restorative in their effects than are drugs. All the secretory organs of the body should be required to perform, as nearly as possible, their natural amount of work.

This once accomplished, and all nature's machinery kept lubricated and in good working order, the local treatment and work of reconstruction will be comparatively easy.

The sores, ulcers, acute and chronic, must be kept clean. This is done very satisfactorily by the application of hot water. If the parts can not be soaked in the hot water, an ordinary fountain syringe can be filled with water (as hot as can be borne, without burning), elevated high enough to give sufficient velocity to the stream which is played over the parts, by the operator holding the nozzle of the syringe a short distance from the seat of the application. The frequency of the washing will depend upon the nature of the case, but should be repeated as often as necessary to keep it clean and free from offensive odors.

To destroy pus and bacteria, and to aid nature in the work of rebuilding of parts invaded, I found hydrozone and glycozone superior to any and all agents tried.

Hydrozone is first applied (after the hot water) by the use of an ordinary glass dropper, or hard rubber syringe, slowly, all over the ulcer, until the pus is destroyed. Effervescence, or fermentation, continues until the enemy is quite dead, but no longer. One layer of absorbent cotton is saturated with glycozone and placed smoothly over the parts, and held in place by a cotton bandage, sufficiently tight to hold the cotton in place.

Other local medications might do as well in some cases, but I have not so found it. The result obtained in the case I report herewith seems to confirm the statements as above made.

Edw. K., aged twenty-three. American, but German descent. A farmer by occupation; unmarried. Rather small in stature, but well-built. Having taken sixteen bottles of "Blood purifier" and a lot of "Anti-constipation pills" within the last eight months for "Falling sickness," came to my office March 19th, with both legs most frightfully ulcerated, from knees to ankles, with considerable discharge of pus from various parts of the legs. Such a case should have been sent to a hospital or sanitarium, for the best systematic treatment obtainable, but, unfortunately, he was so situated that he could not be sent to such a place. In a most pleading way, he asked me if I could do him any good. I told him I thought so, if he would mind me, and take the treatment that I should advise. He promised, and the treatment was begun.

The legs were cleansed by soaking them for twenty minutes in hot water twice a day, after which hydrozone was used freely all over the sores, to destroy the pus, the pustules having been opened, and as much pus evacuated as possible.

After this application, morning and evening, the legs were powdered all over the affected portion with a mixture of equal parts of alum, boric acid and aristol, then covered with absorbent cotton, and bound up with an ordinary cotton gauze bandage.

This local treatment was kept up for two weeks. The improvement was slow, but constant. The process of healing advanced from the knees downward, and from the ankle upward, leaving the last part to heal about the middle of the leg, where the ulceration formed a thick crust, extending two-thirds around each leg.

The constant discharge of pus from the sores caused the dressing to stick to the parts, which could not be removed without difficulty.

The alum, boric acid and aristol powder was discontinued, and glycozone used as a reconstructive agent, from the end of the second week. The sores were washed and the hydrozone used as before mentioned, then the glycozone was applied to the whole affected parts. A layer of absorbent cotton was saturated with glycozone, and smoothly placed around the sores, and held in place by a cotton bandage.

There was not any further trouble about the bandage adhering to the sore. The granulation was much more rapid than at first. At the end of the next week, the results were very gratifying. At the end of the second week after hydrozone and glycozone were used as the sole local agents, the young man said he was well, and worked every day from that time.

The internal treatment was changed from time to time as the case required. Opiates were given several times during the first two weeks of the treatment, to ameliorate the pain, which was very great at times. He was much emaciated and melancholy when he first came to me. His bowels would not move without cathartics.

Fluid extract nux vomica was given morning and noon, seven drops before each meal. Elixir lactopeptin, with bismuth, was given in drachm doses after each meal, and, occasionally, laxatives at night. Later on tincture chloride of iron was given, in ten drop doses, after each meal, for one week.

After the third week no internal treatment was given, as the patient was in good condition, happy and cheerful.

Hydrozone and glycozone were left to complete the structure, and to place upon it the capstone of a beautiful new integument, which they did in a very gratifying way both to the patient and to myself.

JAMES OSBOURN DeCOURCY, M. D.

St. Libory, Ill.

EDITORIAL.

THE HOT SPRINGS OF OUR WESTERN MOUNTAINS.

ARKANSAS, SOUTH DAKOTA, COLORADO.

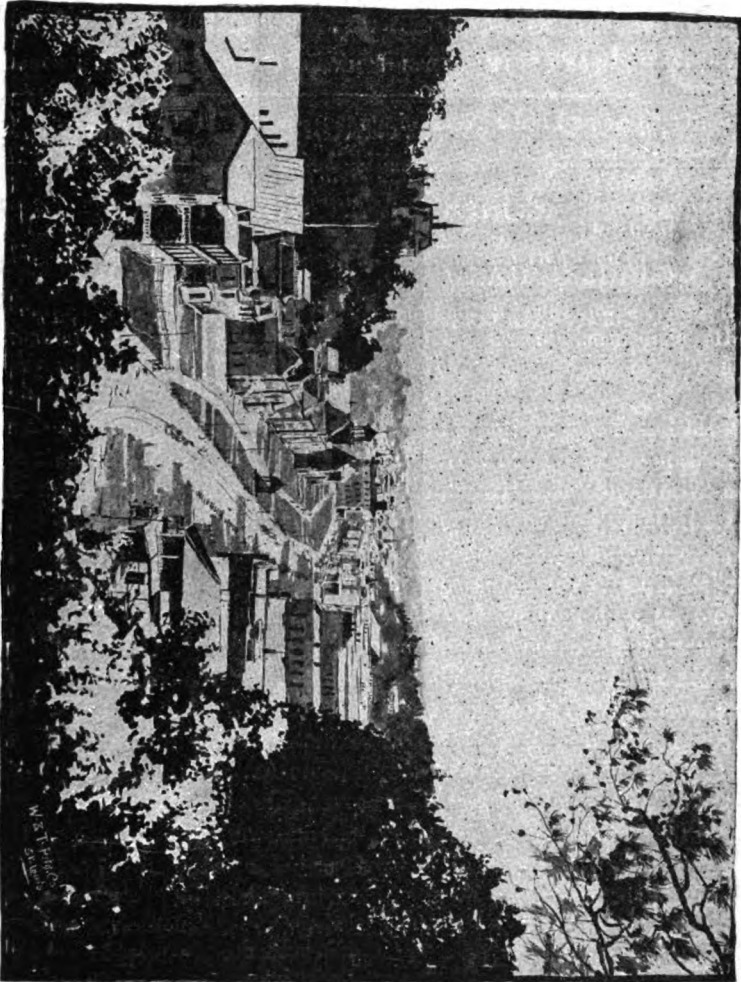
To stand with feet upon cold stone, while the December frost holds all moisture locked in crystal ice and see from depths unfathomed come pouring forth fervent floods of steaming water, heated in depths that have never been explored and furnished with that lavish hand that dame nature displays when she chooses to shower blessings upon her children,—bursting, boiling, seething up and out,—gallons of it, barrels of it, streams of it, ever flowing and ever hot, in chilly April, in sultry August, or in frozen December, is a sight to arrest the attention of a savage or a savant, and to cause one to wonder, to the horizon of his imagination whence come these strange things,—these great waters of Hot Springs?

Yet heat is not the most wonderful attribute of these waters, famous now throughout the world. Held in their crystal depths,—dissolved in their steaming, seething tide, are the medicinal virtues of many chemicals dissolved and mingled and proportioned with a delicacy and an accuracy that no chemist may equal—no apothecary approximate. Every year immense quantities of this great healing agent is utilized in the cure of disease by our people. They drink of it, bathe in it, and millions of gallons flow away untouched and unnoticed. In past years every season has seen the ignorant savage—guided by the instinct within him,—instructed by the Silent Voice that tells each forest bird the course to follow through trackless space to reach the land of sunshine—kneel by these healing waters, sick, weary and disheartened, and thus has bathed in them, has drank of them, to rise again with his savage blood purer and stronger, and soon his rugged nature throwing off disease when aided by such an ally,—he has blessed the waters and the Spirit that sent them and gone his way. And during the long calendar of years that stretch back beyond our doctors and our people: and beyond these savage people; and beyond those other people who saw them come, the warming healing flood has poured forth, wearing a channel for its self in the hard stone of its mountain birth place, obedient to that command of nature we hear not, fulfilling its mission, “You are sick, and we heal you; You are weary, and we give you rest.” And greatest among these great are the trio named, Hot Springs of Arkansas, in the South West—Of Colorado, in the West—Of Dakota, Great Dakota, in the New North West—three great links in the chain that binds Health to remain with Mortals; and we hail them chief factors in the sum of therapeutics,—places where one may sojourn,—throwing

aside poultices and bottles and spoons and prescriptions and while his doctor, having brought him here and directed his course of diet, hunts, fishes and rests he drinks the good waters and delights in them,—bathes in it and enjoys it and grows stronger and better and more healthful for so doing.

Hidden deep in the Ozark mountains, lie the Hot Springs of Arkansas. One may no longer observe the hot water in its natural springs for moved by

CENTRAL AVENUE, HOT SPRINGS, ARK.



the crush of human visitors, the United States Government has taken the matter in hand, and now collects all the water into one huge reservoir and distributes it pumped through pipes to the various bath houses, and in place of the savage camping ground and the primitive inn, now tower some of the finest hotels of the west, and a city is there, not a collection of homes and stores with broad level streets, but a city laid out according to the necessity of the mountain land upon which it is builded, and the streets sweep about the curves of the

mountains or have been notched along their side, and the natural springs that there abound lend their beauty to the landscape. Yet as the accompanying picture will show, the business streets of Hot Springs City are furnished with the embellishments of ordinary metropolitan life, and within the city's limits 15,000 people find their homes. The surrounding country furnishes scenery of the finest to be enjoyed during horseback rides or drives, and the sportsman who is not too hard to please may find enjoyment in the regions lying round about. It is with the springs themselves that this paper has to deal, however, of which there are seventy-one ranging in temperature from 76° to 157° Fahrenheit, and a flow estimated at half a million gallons per day. The medicinal properties consist the salts of calcium, magnesia, silica, soda and potash.

Dr. William Elderhorst has said of the curative effect of the water: "In many forms of chronic diseases, especially, its effects are truly astonishing. The copious diaphoresis (perspiration) which the hot bath establishes, opens in itself a main channel for the expulsion of principles injurious to health, made manifest by its peculiar odor. A similar effect, in a diminished degree, is effected by drinking hot water—a common, indeed, almost universal practice among invalids at Hot Springs.

"The impression produced by the hot douche, also, is indeed powerful, arousing into action sluggish and torpid secretions; the languid circulation is thus purified of morbid matters, and thereby renewed vigor and healthful action are given both to the absorbents, lymphatics and to the excretory apparatus—a combined effect which no medicine is capable of accomplishing.

"The large quantity of free carbonic acid which the water contains, and which rises in volumes through the water at the fountain of many of the springs, has undoubtedly an exhilarating effect on the system, and it is, no doubt from the water of the Hot Springs coming to the surface charged with this gas, that the invalids are enabled to drink it freely at a temperature at which ordinary water, from which all the gas has been expelled by ebullition, would act as an emetic."

At this writing there are fifteen bath houses in operation, besides the free bath house operated by the government. The names of these bath houses, and the tub capacity of each, is as follows:

Alhambra	- - - 40 tubs.	Eastman	- - - 40 tubs.
New Rector	- - - 40 "	Park	- - - 40 "
Lamar	- - - 40 "	Horse Shoe	- - - 30 "
Magnesia	- - - 30 "	Palace	- - - 23 "
Ozark	- - - 22 "	Independent	- - - 21 "
Avenue	- - - 20 "	Rockafellow	- - - 20 "
Rammelsberg	- - - 18 "	Superior	- - - 16 "
Hot Springs	- - - 12 "	Free bath	- - - Pools.

Of these, the Eastman, Park, New Rector and Alhambra are magnificent structures, superbly decorated and appointed, and equipped with every convenience and improvement. The other houses are all in good condition, many alterations and betterments having been made recently, notably the Independent and the Rammelsberg. The Central, one of the oldest houses, is closed, at

least temporarily, and the Big Iron and Old Hale have been destroyed. The Big Iron owners, however, are contemplating the rebuilding of that house on an elaborate scale.

The prices for baths range from twenty cents to sixty cents (the maximum fixed by law) for single baths, and from \$3 to \$8 for a course of twenty-one



HELL'S HALF ACRE.

baths. Attendants are not allowed to collect in excess of fifteen cents per bath or \$3 per course of their services,

The free bath house is the resort of the impecunious, no charge whatever being made either for the use of the water or the attendance. It contains two large pools—one for males, the other for females—and the records show that the average patronage is 650 men and 250 women daily. The pools are emptied

and thoroughly cleansed twice daily, and while in use the water is constantly running into and out of them.*

To the convalescent are offered charming carriage and horse back rides. Kentucky bred saddle horses (the finest in the world) are at his disposal, that will carry him over the rugged mountain paths and show him many a height unattainable by carriage. He may ride to Chalybeate Spring and drink "Iron water," to the White Sulphur Springs a few miles away, to the Potash Sulphur Spring, to Hell's Half Acre a portion of ground about an acre in size sunken ten to thirty feet below the level of the ground, and the bottom formed by rough, jagged rocks lying helter skelter about. No vegetation springs from the rocky surface.—It is a veritable patch of death in life. Or he may ride to the Ouachita river and enjoy some of the scenery and sport that abound there.

The following antheutic information concerning hotels and expenses will enable the doctor to answer many queries from his patients:

"In selecting a hotel there are always several things to be considered before reaching a decision. One may be rich, and wish to surround himself with every luxury; or poor, but still desirous of all possible comfort; an invalid in search of perfect quiet and careful attendance; or in robust health, and on pleasure bent; of strong social tendencies and looking for the companionship of Fashion's devotees; or of a retiring nature, seeking only for seclusion and rest. The patrons of Hot Springs number many of each of these classes, and many more whose tastes and requirements diverge still more. Nevertheless this Arkansas resort is fully equal to the emergency. Its five hundred hotels and boarding-houses are of all grades and suitable for all sorts and conditions of men. There is no place of the kind in the country—perhaps not in the world—where every one, no matter what his social, financial or physical condition may be, can find an abiding place perfectly adapted to his needs, so readily as at Hot Springs, Arkansas."

The Hotel Eastman is an imposing five-story building, of colossal dimensions, covering several acres of ground, and crowned with lofty towers and observatories which overlook the Ouachita Valley and the peaks of the Ozarks for miles and miles. It is constructed on two sides of a quadrangular park, decorated with trees, flowers and fountains, forming a delightful approach. It contains five hundred and twenty guest rooms, and each one may be called a front one.

The Park Hotel, in a most delightful portion of Hot Springs, contains 275 guest rooms, all, like the preceeding of excellent arrangement and location.

The New Arlington is the third of the great trio, of perfect appointment and correct management. All three are simply perfect in detail of their finish and management. All have perfect bath facilities and the three represent an investment of about two million dollars.

Besides these three hotels already described, and which are more especially patronized by the wealthier class of pleasure seekers and invalids, there are a dozen or more first-class hostleries at which lower rates prevail, and four or five hundred boarding houses. Of the hotels, among the best known are the Hotel

*From "The Hot Springs Picture Book," issued by the Missouri Pacific R. R., and sent upon request by H. C. Townsend, G. P. and T. A.

Hay, the Pullman, the Avenue, the Waverly, the Hotel Worrell, the Josephine, the Sumpter, the Blateau and the Grand.

The more pretentious boarding houses assume names—the Albion, the Burlington, Taylor's, Magnolia Villa, Haynes Villa, for example. These houses



OUACHITA RIVER, NEAR HOT SPRINGS, ARK.

are handsomely furnished, conveniently located, with pleasant surroundings, and are well patronized, as their excellent conduct deserves. Following the descending scale of prices, come the numerous lodging houses, whose only name is the

invariable "elegantly furnished rooms for rent, with board," and last come the furnished rooms, nearly every house in the city, even to the humblest cabin, having "a vacant room" somewhere about the premises.

There is no good reason why the food served at any of the boarding houses should not be nourishing and of agreeable variety, and it is a commendable fact that in this respect Hot Springs enjoys an enviable reputation. A branch establishment of the Armour Dressed Beef Company furnishes good fresh meats in abundance and at as low prices as prevail anywhere." Thus we see that hotel and board bills will range from \$10.00 per day, down to \$5.00 per week. It seems that none should be deterred from testing the virtues of the Springs from an inability to meet the expense.

The wonderful cures at the Springs, we, as thoughtful physicians, do not credit too much to medicinal virtues of the waters, yet all considered it is probable that more chronic cases are cured by a residence at Hot Springs and the treatment there obtainable than in any other way. We are all proud of Arkansas Hot Springs, and with good reason. Of the chain of great resorts it is a central link—blessed of God, favored by nature, and garnished and embellished by man until but little can be imagined that is not here.

NEW JOURNALS.

Volume one, number one of the *Missouri Sanitarium* is on our table. It is dated November, and is published monthly by the State Board of Health of Missouri. It has for its object the dissemination among the citizens of our state of such matters pertaining to the public health as may be beneficial and necessary for the preservation of their welfare and conducive to their happiness; and secondly, to acquaint them with the actions of the Board created for these purposes. As it is not supposed to be a financial venture, its subscription price is 50 cents a year. It will probably prove of value in promulgating the doings of the State Board of Health. The editors are Drs. Frank J. Lutz, Albert Merrell, and Paul Paquin, a staff capable of running a first class paper.

* * * *

Another new journal, beginning with the December number, is entitled *Journal of Medicine and Science*. There is nothing distinctive in its make up, being composed chiefly of the papers read, and the discussions held thereon, before the Main Academy of Medicine, and will be of especial interest to the physicians residing in that locality. We wish it success. The statement is made upon the title page that it has a circulation of 30,000 copies. It is probable that this is a printer's mistake, if not, we should certainly congratulate the managers upon the foundation of a fortune thus securely laid.

* * * *

Another new journal, which we note with pleasure, is the *Colorado Climatologist*, which has incorporated the old *Denver Medical News*, added the strength of a new company, and thus equipped starts out, bright and newsy, to fulfil its mission in the world, namely: to make known the value of Colorado climate as a cure for consumption. Dr. Charles Manley, is its editor; he is aided

by a large list of collaborators, among which we notice the names of the best physicians of Colorado. Hail, *Climatologist!!* May you climb high and shed your good light far and wide.

EDITORIAL NOTES.

CASTRATION IN HYPERTROPHY OF THE PROSTATE GLAND.—Among the new surgical procedures that are winning fame for their originators and at the same time bringing welcome relief to suffering humanity, the operation of Castration or Ligation of the Spermatic Cord for Prostatic Hypertrophy holds a prominent place. In the January INDEX we published a contribution from J. Ewing Mears, of Philadelphia, entitled "Ligation of the Cord in Prostatic Hypertrophy," and this month we are pleased to offer the following from advance proof sheets kindly sent to the INDEX by the publishers of the *University Medical Magazine*, Philadelphia, Penn.

"When Dr. J. William White first suggested to the profession the operation of castration for the relief of hypertrophy of the prostate gland (Address at the Annual Meeting of the American Surgical Association, June 1, 1898, *Annals of Surgery*, August, 1898.) on theoretical grounds, although strongly supported by experimental evidence, it is doubtful whether any one appreciated the full value of the recommendation. Cases of prostatic hypertrophy are of extreme frequency. Sir Henry Thompson found that one man of every three over 54 years of age examined after death showed some enlargement of the prostate; one in every seven had some degree of obstruction present; while one in fifteen had sufficient enlargement to demand some form of treatment. In this country today, as shown by the last census, there are more than three millions of men over fifty-four; of these, according to Thompson's estimate, which genito-urinary specialists consider a conservative one, about two hundred thousand are sufferers from hypertrophy of this gland. This number seems very large, but the assertions of Thompson unquestionably express a general rule, and in fact every surgeon must have seen men in whom some prostatic overgrowth existed *before* the fifty-fourth year. The lives of such patients are threatened because, if the obstruction is not removed, the health is rapidly undermined by the retention of urine and the consequent fermentative changes, the deleterious influence of backward pressure on the kidneys, the frequent use of the catheter, and the loss of sleep incident to the incessant demands to void urine. Heretofore the surgeon has been unable to afford distinct relief from the distressing symptoms of an advanced case of this affection. If the patient's general condition would warrant the very considerable risk, some form of prostatectomy was performed. The suprapubic method was recommended for a time, but the difficulties encountered in its performance, the frequency of suprapubic fistula as a sequel, and the high mortality following the operation have led to its almost total abandonment. Perineal prostatectomy is also attended with considerable risk on account of the free hemorrhage, which cannot be controlled during the operation, and the prolonged anesthesia which is necessary. In addition to this, the operation is a bungling one, in which the enlarged gland is removed by cutting, scraping, or gouging, while the instrument is out of sight, and much of the time it cannot be guided even by the finger. Combined suprapubic and perineal prostatectomy enables the operator to reach and enucleate the gland with greater freedom, but it is an operation of such gravity that it would be contraindicated in the very cases in which the demand for relief was most urgent.

Perineal prostatectomy is little more than a palliative measure, which does some good, temporarily, by draining the bladder and inducing slight contraction of the middle lobe of the prostate in the healing process. All of these operations confine the patient to bed for several weeks, which is, in itself, objectionable, and in addition require the use of the bougie for a long time afterwards.

In view of these facts it is not strange that surgeons should have presented Dr. White's suggestion to patients suffering from the consequences of prostatic hypertrophy, nor is it unnatural that such patients accepted this chance for relief from a condition that in many cases was rapidly and surely impairing the health of a person otherwise vigorous and, apparently, without this trouble destined to enjoy many additional years of life.

With the testes already or soon to become functionless, and with the contemplation of a long period of intense suffering which will be relieved only by death, sentimental objections pale into insignificance, and the problem of securing relief without placing the life in danger is the only one entitled to consideration.

Cases of castration based upon Professor White's deductions soon began to be reported. Ramm, of Christiania, Norway, recorded two in September, 1893; Haynes, Los Angeles, Cal., and White, Philadelphia, each report three cases; Finney, Baltimore, reports two cases; Smith, St. Augustine Fla., Powell, London, Mayer and Haenel, Dresden, Moullin, London, Thomas, Pittsburg, Ricketts, Cincinnati, Swain, Bristol, England, and Bereskin, Moscow, each recorded one case. Thus far eighteen operations have been published. All have been more or less successful, and usually the relief from the distressing symptoms and the shrinking of the prostate have been marvellous. The least favorable cases have experienced infinitely greater relief than has been obtained by any method heretofore employed. At least as many unpublished cases have been operated upon with equally favorable results. There have been no deaths from the operation; of course, few would be expected in the hands of competent surgeons.

To those familiar with these cases, the rapid shrinking of the prostate and the simultaneous relief afforded the patient, have been truly wonderful. The operation has therefore passed the experimental stage, and has legitimately established for itself a position among the most successful of operative procedures. Indeed, the results have been so uniformly favorable that castration may now be considered a specific for hypertrophy of the prostate.

It is necessary, however, to utter a word of caution here. Castration is not indicated in every case of prostatic enlargement or urinary obstruction. To secure uniformly successful results one must be certain that the condition from which the patient is suffering is appropriate for the operation. Cases of prostatitis, tumors of the prostate and of the region of the neck of the bladder, and other forms of obstruction in the neighborhood of the prostate must be distinguished from true prostatic hypertrophy. Without careful discrimination, both the surgeon and the patient will be disappointed, and the operation will unnecessarily be brought into discredit.

As it stands today, however, in appropriate cases, it appears to mark an advance in the surgery of the prostate, which, when the gravity and the frequency of the condition of hypertrophy are recalled, together with the more or less ineffectual and always dangerous methods of treatment which have prevailed, must be a source of congratulation not only to Professor White, but to the profession at large, and to thousands of patients who, having outlived their sexual lives and earned an old age of mental and physical repose and intellectual enjoyment, have had only a few short years of torment and misery to look forward to on account of this hitherto intractable disease."

THE REAL VALUE OF THE MEDICINAL PEROXIDE-OF-HYDROGEN PREPARATIONS FOUND IN THE MARKET.—H. Endemann, Ph. D., chemist, formerly with the Health Department of New York City, gives in the *Times and Register*, the results of his examination of fourteen fresh samples of peroxide-of-hydrogen preparations. He writes: "Hydrozone is far superior to any other brand which has ever been made, not only on account of its containing a much larger amount of oxygen, but also owing to the presence of a small quantity of several essential oils, the respective nature of which could not be determined, very likely because they have been submitted to the oxidizing action of peroxide of hydrogen before being used to make hydrozone,

"I attribute to this small quantity of essential oils the great superiority of hydrozone over any other brands of H_2O_2 as a healing agent.

"When hydrozone is diluted with distilled water, in the proportion of half and half, the resulting mixture contains about 13.5 volumes of available oxygen.

"My opinion is that a standard solution of medicinal H_2O_2 must answer the following tests:—

"1. It should contain at least 15 volumes of available oxygen.

"2. The quantity of free acids contained in 100 cubic centimetres should require not less than 1 cubic centimetre and not more than 3 cubic centimetres of normal volumetric soda solution to be made neutral. Such a small quantity of free acid is not objectionable.

"3. It should not contain any soluble baryta salts.

"4. It must be free from sediment.

"These brands have been tested for the volume of available oxygen, the amount of residue, the degree of acidity, and the amount of soluble baryta salts contained therein, as per following table:—

BRANDS OF H_2O_2 SOLUTIONS.			Volume of Available Oxygen determined by means of a solution containing 5.665 Grammes of Potassium of Potash per liter of dis- tilled water.	Residue obtained from 100 C. C. of Peroxide of Hydro- gen dried at 120 degrees F.	Acidity expressed in Cubic centimeters of Normal Volumetric Soda Solution for 100 C. C. of Peroxide.	Baryta found in Soluble Baryta Salts contained in 100 C. C. of Peroxide.
No. 1.	John Bene's	H_2O_2 (Medicinal)	10.50	0.1886	2.19	None
No. 2.	Hydrozone		27.35	0.2180	3.11	"
No. 3.	Larkin & Scheffer's	H_2O_2 (Medicinal)	9.65	0.1206	6.75	"
No. 4.	Mallinckrodt's	" "	9.55	0.1408	1.43	"
No. 5.	Marchand's	" "	16.55	0.564	1.29	"
No. 6.	McKesson & Robbins'	" "	10.95	0.0540	0.44	"
No. 7.	Merck & Co.'s	" "	0.50	0.2418	4.57	"
No. 8.	Oakland Chemical Co.'s	" "	10.50	0.0382	0.34	0.0017
No. 9.	Peuchot's	" "	10.60	0.4674	1.77	0.0018
No. 10.	Powers & Weightman's	" "	8.40	0.0830	2.03	None
No. 11.	Pyrozone, 3 per cent.	" "	11.20	0.0534	0.76	"
No. 12.	Rosengarten & Son's	" "	3.10	0.1002	0.25	"
No. 13.	Smith, Kline & French Co.'s	" "	6.15	0.0880	2.6	"
No. 14.	E. R. Squibb's	" "	12.40	1.004	12.04	"

"The brand No. 2, which is sold without any mention of volume, is really a 27.35 volume solution, viz., 90 per cent. above the standard."

INSANE PERSONS SENT TO POOR FARMS.—Missouri has a state law authorizing counties of one-thousand inhabitants or more, to build and maintain Insane Asylums. Under this law several counties have added to the poor farm buildings or have erected new buildings on their farms, and have sent their insane to these places. Imbeciles and chronic insane persons are very undesirable inhabitants for the poor farm. They are entitled to asylum care, and the skilled treatment that can only be obtained there. An urgent protest has been continually entered against this practice in Kansas City, and it is with pleasure that we note that Superintendent Woodson, of Asylum number two St. Joseph, Mo., in his report to Governor Stone and the legislature, now in session at Jefferson City, condemns this proceeding, and condemns it in a straight forward

emphatic manner. "I think your honorable body should enact laws that will prevent county courts from placing the insane in poor-houses and prisons. The disposition to remove to such places is for the purpose of economizing, and the difference is so little for their maintenance in such places and in first-class institutions that it ought not to be tolerated. The law entitles the insane to the full benefits of well regulated institutions for the care and treatment of the insane, as much so as it entitles the children of this state, of school age, to the public schools. I desire to call your attention to sections 491-92-93-94-95-96, Revised Statutes '89, and you will observe in every instance bearing upon the commitment of a patient the word "shall" is used, making it mandatory upon courts to commit them to asylums. And I have been unable to find one word that authorizes them to send them to poor-houses. Insanity is a great affliction. I know nothing that equals it, and believe that persons so afflicted should, in accordance with the spirit of the nineteenth century, receive better treatment than is possible for them to receive in alms houses or prisons; by so doing many can be restored to their families, become producers and taxpayers, instead of being regarded as paupers and dealt with as such. I think it impossible to too greatly emphasize the necessity of Missouri taking a step in this direction, as there are many states that have already enacted such laws. I most respectfully urge your honorable body to give this subject due consideration."

DR. LEWIS, ON COMPOUND FRACTURES.—Dr. E. R. Lewis, of Kansas City, has written an article for the *Fort Wayne Medical Magazine* of January 1895, upon the very interesting topic of compound fractures. He states the following:—"I conceive the first dressings of a compound fracture to be of paramount importance, and no surgeon should ever reduce a compound fracture until it has been rendered as clean and free from all unnecessary complications as possible (such as dirt, small pieces of bone, etc.) which must and do complicate, after reduction, if left in the wound; since receiving the program of this meeting I have received into our hospital a compound Potts' fracture. The internal malleolus was broken completely through, the fibula in its lower fifth, a great eversion of the foot, and protasion of tibia, and after reduction the greatest difficulty in coapting the distal fragment of maleolus with its counter part. Yet realizing the great importance of such adjustment, it was accomplished after much exertion, and the so excessive oozing required the insertion of a drainage tube which was left until the fourth day. In such a complicated compound fracture I could not recommend an early plaster dressing, as some do, closing entirely the external wound, trusting to the temperature, or other constitutional disturbances to guide one in opening up the dressing, but preferred to fix the limb in proper metallic splints, draining the wound into iodoform gauze, with a rubber drainage tube, renewing the gauze daily, till bloody oozing had ceased, and then a plaster dressing, leaving a fenestra for frequent inspection. After some experience with wire, ivory nails, silk and cat-gut in the fixing of fractures, I am most strongly impressed with ivory nails, and I have repeatedly bought long ivory crochet needles in the dry good stores, cutting them in lenghts to suit size of parts to be fixed, filing to a point at one end, soaking over night in a one to two thousand corrosive sublime solution, wash well before using in water that has been properly sterilized, and through a suitable opening made in fragments with a Brainard drill, nail the part in perfect apposition with the ivory nails, leaving both ends of the nail covered in the osseous parts, close entire wound antiseptically, and fix with proper longitudinal splints."

THE HANDS AND IRRITATING ANTISEPTIC.—No doubt all of our readers have been troubled with roughness and irritation from corrosive snblime and other irritating antiseptics. The following method of avoiding this trouble comes from Dr. Schneider of Germany, and is so simple that all should remember it. After using corrosive sublimate, wash the hands in a solution of salt and water, (for other irritating antiseptics this is not necessary) next, rinse the hands in alcohol then wash in soft water, while still damp rub into the skin a small quantity of lanoline.

SALICYLATED IRON MIXTURE.—We reproduce the following prescription as well worth many times the price of a years subscription to the INDEX. It is especially valuable at this season of the year when rheumatic troubles are so prevalent.

R—Sodii salicylatis	3iv.
Tinct. ferri chloridi	f3iv.
Acidi citrici	grs. x.
Glycerini	f3iss.
Ol. gaultheriæ	m viij.
Liq. ammon. citratis, q. s. ad.	f3iv.
Sol. sec. art. dos. f3j or f3ij.	

Dissolve the citric acid and sodium salicylate in the liquor amonii citratis. To the glycerin add the tincture of iron chloride and then mix the two solutions, finally adding the oil of gaultheria. One or two drams of mucilage of acacia would be a valuable addition with which to emulsify the oil of gaultheria.

In this prescription reaction takes place between the ferric chloride and sodium salicylate, resulting in double decomposition, giving iron salicylate in the first solution. Care should be taken to keep the liquor ammonii citratis in slight excess, in order to have a perfectly clear solution of salicylate of iron.

Dose.—One or two teaspoonsfuls.

This prescription is used principally in the treatment of chronic cases of rheumatism or rheumatoid arthritis in which anemia or other evidence of impaired nutrition is a distinct feature. It is likewise employed in acute tonsillitis of rheumatic origin, and in acute articular rheumatism in anemic subjects, especially if the patient has suffered from one or more previous attacks.

The ordinary dose in chronic cases in adults is a dessertspoonful four times a day; in acute cases the same dose is given every two hours until tinnitus is produced or decided amelioration has occurred, when the dose is diminished or the intervals between doses lengthened.—**SOLOIS-COHEN**, *Philadelphia Polyclinic*, vol. iii, No. 82, p. 81.

GROWING PAINS.—In a recent number of the *Archives of Pediatrics* an interesting paper, appears entitled "Growing Pains." Every day, shows the fallacy of such diagnosis, when a child is suffering from any painful disease. "Growing Pains" are a thing of the past, and when one is tempted to make such a diagnosis he should carefully consider the following five disorders one of which will surely be found to cover the case in question:—

1. **Myalgia from Fatigue.**—This is the commonest variety, usually about the knees and ankles after unusual exertion. They are probably due to auto-infection, brought about by excessive production of effete material in the blood and their inefficient elimination. Elevating the limbs and massage promptly brings relief.

2. **Rheumatism.**—This is second, if not first, in frequency. There is slight pain in the joints, little or no swelling, and very mild fever, and hence the true cause is not recognized; but rheumatic endocarditis frequently develops in these cases.

3. **Disease of Joints and Bones of Lower Extremities.**—Cases of hip-joint disease and suppurative epiphysitis of the upper end of the fibula, diagnosed by the laity and allowed to go on untreated, are related under this heading.

4. **Fevers, accompanied by pains in the limbs**, in one instance proving to be the inception of typhoid fever, constitutes this class.

5. **Adenitis.**—Here, again, the mother still supposed that the lad of sixteen years was suffering from "Growing Pains," but he was treated for gonorrhea and a syphilitic bubo. The writer then goes on to say that like dentition, this diagnosis is made a veritable scape-goat, and thereby causes much suffering and even death, by precluding proper treatment.

DIGITALIS IN THE TREATMENT OF PNEUMONIA.—Dr. Foster, in his address in medicine before the Pennsylvania State Medical Society, is quoted by the Polyclinic as making some very positive statements, concerning the value of Digitalis in the treatment

of pneumonia. It is probable, with the use of strychnia and digitalis in the way that the doctor speaks of, namely: the largest dose that the system will tolerate, that very much of the benefit derived comes from the strychnia. However, we give the doctor's remarks as they occur:—"In pneumonia, however, we have the field where digitalis is the remedy par excellence. That recoveries from this disease will and do occur in greater numbers when it is treated by large and persistent dosage of digitalis, than occur without its use, seems to be the growing belief in medical practice today. In conjunction with strychnia, given in physiological doses, digitalis is administered until the pulse comes down, to 90 a minute. If it can be kept there, as a rule recovery will ensue in a shorter time than by the use of other methods of treatment."

A NEW THEORY AND TREATMENT FOR CONSUMPTION.—Dr. Frank Parsons, editor of the *Times and Register*, of Philadelphia, began in the January issue of that journal, a series of articles under the above heading. He treats of the cause of consumption from a new and rational point of view, in which he places the germ theory in a secondary light, and considers the true cause of consumption to lie in lymphatic stasis. He says: "We should be thankful for the work of the bacteriologist, but we have lost sight of the chemical composition of man, and of the fact that disease is only a chemical decomposition, in the furor after the specific germ phenomena, of which may be observed in various media both in and outside of the body." The article is interesting to any one who feels the necessity of deep study into the ultimate cause of consumption, and who of us does not? We regret the article is too long to reproduce in these columns, and can only refer our readers to the original.

A NEW CITY HOSPITAL FOR KANSAS CITY.—We learn from house physician, Doctor Coffin of the City Hospital, that plans have been completed for the enlargement of the City Hospital, to cost not to exceed \$15,000. The plans call for a brick structure immediately south of the old building, having a depth of 104 feet, with an "L" 49x24 feet. The front of the main structure will be forty feet wide for a depth of thirty-eight feet, and will then be narrowed to twenty-four feet for a distance of thirty-nine feet.

On the first story of the new building will be the drug room, doctor's office, a men's ward 68x23 feet, containing twenty-two cots; a women's ward, 39x23 feet, containing thirteen cots, and a dying room. On the second floor will be a suit of two rooms for special patients, another dying room and a men's and women's ward of the same dimensions as those on the first floor. In the basement will be the men's dining-room and the kitchen. The frame building now used as a separate ward, located just south of the main building, will be removed to the west end of the lot and used as a contagious disease ward. The new building will be connected with the old at the southwest end. More modern conveniences than are furnished in the old building will be provided.

LOCOMOTOR ATAXY.—According to Prof. Fournier the first symptoms of ataxy may be classed as follows:

1. Sign of Westphal.
2. Sign of Romberg.
3. The "stairs" sign.
4. Crossing of the legs.
5. Walking at the word of command.
6. Standing on one leg.

1. Westphal's sign is well known; it consists in the abolition of the patellar tendon reflex, and is present in two thirds of the cases.

2. Romberg's sign can be thus appreciated: The eye is an indirect regulator of motion; it helps to correct deviations in walking and maintains the equilibrium. When a patient is suspected of incipient ataxy, it will often suffice to make him close his eyes when in the erect position to verify the diagnosis. In a few instances his body will oscillate, and if the malady is somewhat advanced he will be in danger of falling.

3. The "stairs" symptom. One of the first and most constant symptoms of incipient locomotor ataxy is the difficulty with which the patient will descend stairs. If questioned closely on the subject, he will say that at the very outset of his malady he was always afraid of falling when coming down stairs.—*New York State Medical Reporter*.

FOR CORNS AND THINGS.

Trim your corn in the gray of the morn.
 With a blade that's shaved the dead,
 And barefoot go and hide it so
 The rain will rust it red:
 Dip your foot in the dew and put
 A print of it on the floor,
 And stew the fat of a brindle cat,
 And say this o'er and o'er:—
 Corney! morney! bladey! dead!
 Gorey! sorey! rusty! red!
 Footsy! putsy! floory! stew!
 Fatsy! catsy!
 Mew!
 Mew!
 Come grease my corn
 In the gray of the morn!
 Mew! mew! mew!
 JAMES WHITCOMB RILEY.
 In "Armazindy."

BOOK TALK.

Books reviewed in these columns may be obtained of Dr. A. M. Wilson, room 27, Union Depot, Kansas City, Mo. Discounts where possible.

A DICTIONARY OF MEDICINE.

A DICTIONARY OF MEDICINE, including General Pathology, General Therapeutics, Hygiene and the Diseases of Woman and Children, by various writers. Edited by RICHARD QUAIN, Bart., M. D., London, LL. D., Ed., F. R. S., President of the General Council of Medical Education; Member of the Senate of the University of London; Hon. M. D. Trinity College, Dublin; Hon. M. D. Royal University of Ireland; Fellow, late Vice-President and Senior Censor of the Royal College of Physicians; Hon. Fellow of the Royal College of Physicians of Ireland; Physician Extraordinary to Her Majesty the Queen; Consulting Physician to the Hospital for Diseases of the Chest, Brompton, and to the Seamen's Hospital, Greenwich. Assisted by Frederick Thomas Roberts, M. D., London, B. Sc., and J. Mitchell Bruce, M. A., Aberdeen, M. D., London, with an American Appendix, by Samuel Treat Armstrong, M. D., Ph. D., Visiting Physician to the Harlem, Willard Parker and Riverside Hospitals, New York, etc. New edition, revised throughout and enlarged. Imperial 8vo, in two volumes, pp. 2564, illustrated. New York: D. Appleton & Company. 1894. \$7.00 per volm.

"Twelve years ago, when the first edition of Quain's Dictionary appeared, it at once met the favor of the profession, and the review columns of the medical journals were full of praise for the manner in which the editor had grouped such a vast amount of information and made it available for ready reference. It is asserted, since its first appearance, that more than 88,000 copies have been issued. This, alone, furnishes substantial proof of the value of the work,"—*Buffalo Medical and Surgical Journal*,

And now, twelve years have passed, the editor completely revises the work, bringing it up to date and increasing very much its practical utility. It furnishes such an available method of "looking up" matters needing attention. One has only to look

under the alphabetically arranged headings to find his subject, and having quickly found it, can get in a condensed form the necessary information.

The work, now, consists of two volumes, and has been entirely reprinted in larger type. The number of pages has been increased from 1834 to 2566, and forty-three new illustrations have been added, increasing their total number to 181.

It is, by far, the most complete dictionary of medicine in two volumes extant. The mechanical execution of the work ranks among the best, and the continued favor of the profession—practitioners, teachers and students,—is already assured.

THEORY AND TREATMENT OF PULMONARY TUBERCULOSIS.

A PRACTICAL THEORY AND TREATMENT OF PULMONARY TUBERCULOSIS, by Frank S. Parsons, M.D., editor of the *Philadelphia Times and Register*. Published by the Medical Publishing Company, 718 Betz Building, Philadelphia, Pa. Price, 25 cents. Paper cover.

This monograph covers seventy-seven pages of a neat little volume. It treats of a subject of universal interest to all scientifically inclined persons.

The author views tuberculosis in a new light, and from a more rational standpoint than any that has recently been advanced. This work, it is safe to say, marks a new era in the study of this disease.

The first pages are devoted to an interesting introductory, illustrative of the present condition of medical thought upon the subject. The causation of tuberculosis is then taken up, and is admirably and ably shown that the dominant theory regarding the tubercle bacillus as a causative agent is not based on the true pathological condition in the early stage of phthisis. Bacilli are to be regarded only as developments, existing because a favorable medium presents. This medium exists before the bacillus is demonstrable, and consists of the waste elements of the blood congregating in a locality through lymphatic obstructions or stasis.

In the pages devoted to a consideration of symptomatology it is suggested that, in view of the universal dislike of fats by phthisical persons, there doubtless exists a disordered condition of the pancreas, which condition may be congenital or acquired.

Dr. Parsons has based the treatment of consumption on the lines of this new theory, calling attention to advantages to be gained by elimination, nutrition and oxygenation. The low price of the book places it in reach of everyone, and no physician should be without it.

A PRIMER OF PSYCHOLOGY AND MENTAL DISEASE.

A PRIMER OF PSYCHOLOGY AND MENTAL DISEASE. By C. B. Burr, M. D., Medical Superintendent of the Eastern Michigan Asylum, etc., etc. Cloth. 12mo. 105 pages. Price \$1.00, (with a discount of 10 per cent to institutions ordering a number of copies). Geo. S. Davis, Detroit, Mich. 1894.

This is indeed a primer and renders in a clear unmistakable way the elementary facts of psychology. It is divided into three parts.

Part I is devoted to the study of the faculties of the normal mind. Definitions are brief and pointed, great pains having been taken to simplify psychological study, but at the same time to employ terms in their precise and technical significance.

Part II is devoted to mental diseases, causes and forms of insanity being discussed in accordance with an original plan of the author's.

Part III deals with the management of cases of insanity. This part of the work cannot fail to be of service to the general practitioner, as well as the medical student and attendant, although especially addressed to the latter. Explicit directions are laid down for the care of cases. The various emergencies encountered in the treatment of patients are discussed, and rules of conduct suggested for the every day guidance of the attendant.

Truly a valuable little work.

REPRINTS AND PAMPHLETS RECEIVED.

- HALLUCINATIONS AND DELUSIONS. By William M. McLaury, M. D., New York City.
- THE CORPUSCLE. By students of the Rush Medical College, 735 Jackson Boulevard, Chicago, Ill.
- NEUDORFER'S METHOD OF AMPUTATING EXTREMITIES, WITH A REPORT OF TWO THIGH AMPUTATIONS. By A. H. Meisenbach, M. D., of St. Louis, Mo.
- THE TEACHING OF ANATOMY. By William Keiller, F. R. C. S. Ed., Edinburgh, Scotland.
- OPERATIVE TREATMENT OF MYOFIBROMA UTERI. By N. Senn, M. D., Ph. D., L. L. D., Chicago, Ill.
- NOTES ON A FEW CLINICAL EXPERIMENCES OF INHERITED SYPHILIS. By Burnside Foster, M. D., St. Paul, Minn.
- INTESTINAL ANASTOMOSIS WITH THE REPORT OF A CASE. By Frederick Holme Wiggin, M. D., New York.
- LIMITATIONS IN THE TREATMENT OF THE IDIOT. By Dr. Brummel Jones, Kansas City, Mo.
- A PLEA FOR A HOME FOR THE CARE AND TRAINING OF THE FEEBLE-MINDED YOUTH. By Dr. Brummel Jones, Kansas City, Mo.
- DIPHTHERIA ANTITOXIN. By Schering E. Glatz, New York.
- THE MISSOURI SANITARIAN. By The State Board of Health of Missouri.
- THE PATHOLOGY, SYMPTOMATOLOGY AND TREATMENT ON HEMORRHOIDS, SIMPLE AND COMPLICATED. By Thomas H. Manley, M. D., Harlem Hospital, New York.
- SURGICAL TREATMENT OF TUMORS OF THE NECK. By Thomas H. Manley, M. D., Harlem Hospital, New York.
- COLDS, THEIR CAUSES, PREVENTION AND TREATMENT. By F. E. Waxham, M. D., Denver, Colo.
- UBER EINE FAREMETHOLDE, MIT DER MAN DIABETS UND GLYOOSURIE AUS DEM BLUTE DIAGNOSTICIREN KANN. By Dr. Ludwig Bremer, St. Louis, Mo.
- SALOPHEN. By W. H. Schieffeltin & Co., New York.
- ASTIGMATISM AS A FACTOR IN THE CAUSATION OF MYOPIA. By Leartus Connor, M. D., Detroit, Mich.
- CONTUSION OF THE ABDOMEN, WITH RUPTURE OF THE THORACIC DUCT. By Thomas H. Manley, M. D., Harlem Hospital New York.
- REST IN BED AS A RECOURSE IN THE TREATMENT OF CHRONIC NON-SUPPURATIVE CATARRH OF THE MIDDLE EAR. By A. Britton Deynard, M. D., New York.
- FIVE YEARS' WORK IN DISEASES OF THE RECTUM. By Charles B. Kelsey, M. D., New York Post-Graduate Hospital.
- MALTINE. Illustrated by The Maltine Manufacturing Company.
- OPERATIVE TREATMENT OF GALL STONES. By J. F. Binnie, C. M.

LITERARY NOTES.

The "visiting list" we must have, for records of business, for ready reference and for memoranda. Probably every physician loses money enough from unrecorded calls being forgotten, to buy his library.

The Physician's Visiting List as arranged in convenient pocket form by P. Blakiston, Son & Co., has long been one of the indispensable things in the practice of medicine. The edition for 1896 is even more complete than former editions, if such a

thing were possible, and we heartily recommend it to the medical profession. P. Blakiston, Son & Co., 1012 Walnut St., Philadelphia.

The Rev. William Bayard Hale, whose articles in *The Forum* on the religious condition of Middleboro and Fall River, Mass., attracted so much attention, has written for the February *Forum* an article on the religious conditions of Westerly, R. I., entitled "A Religious Study of a Baptist Town."

The *Anals of Surgery*, *University of Pennsylvania Press*, \$5.00 per year, offers in its February number an editorial entitled "The Ambulant Treatment of Fractures of the Lower Extremity." It reproduces the transactions of the New York Surgical Society, and transactions of the Philadelphia Academy of Surgery, and gives six original articles from noted writers on surgical topics. The department of surgical progress is especially rich in contributions.

Mr. Joel F. Vaile, of Colorado, contributes to the February *Forum* an article entitled "Colorado's Experiment with Populism," in which he shows that Populist ascendancy in Colorado was purely accidental and did not represent the great mass of citizens. He declares that nowhere in the Union "will there be found a stronger spirit of business integrity and faithfulness in financial obligation than among those who bear the burden of taxation" in Colorado, and that Colorado is not likely to repeat her experiment in Populist government.

General Lord Wolseley makes a most important contribution to the literature of the China-Japan war. In an article for the February *Cosmopolitan*, he discusses the situation and does not mince matters in saying what China must do in this emergency. Two other noted foreign authors contribute interesting articles to this number. Rosita Mauri, the famous Parisian danseuse, gives the history of the ballet, and Emile Ollivier tells the story of the fall of Louis Philippe. From every part of the world, drawings and photographs have been obtained of the instruments used to torture poor humanity, and appear as illustrations for a clever article, by Julian Hawthorne, entitled, "Salvation via the Rack." Mrs. Reginald de Koven, Anatole France, W. Clark Russell, Albion W. Tourgée, and William Dean Howells are among the story tellers for the February number of *The Cosmopolitan*.

Another issue "January," of that most excellent Journal *The Alienist and Neurologist*, is upon our table, among its contents we note the following:—"Evidences of Sanity in Criminal Cases," by Jas. G. Kiernan, M. D., Chicago; "Observations on the Histological Development of the Cerebellar Cortex," by Dr. Aurelio Lui, Brescia Provincial Asylum; "Physiological and Therapeutic Researches on the Pseudo-hyosciamine of Merck," by Doctor Giuseppe Guicciardi; "Bilateral Paralysis of the Facial Nerve," by Dr. Monjouhko, Russia; "The Evolution of Scientific Neurology and its Utility in Medical Practice," by John Punton, M. D., Kansas City, Mo.; "Study on Criminal Anthropology," by Dr. Abundio Aceves, Guadalajara, Mexico; "Psychical and Physical Sanitation, The Influence of the Press Thereon," by C. H. Hughes, M. D., St. Louis; Editorials, Selections, Hospital Notes, Reviews, Etc.

The Forum for February, 1895, contains the following:—Should the Government Retire from Banking? by W. C. Cornwell, President N. Y. State Bankers' Association; Why Gold is Exported, by Alfred S. Heidelberg; The Programme of German Socialism, by Wilhelm Liebknecht, Leader of Social Democrats in the Reichstag; The Social Discontent—I. Its Causes, Henry Holt; Has the Law become Commercialized? Wm. B. Hornblower; The Outlook for Decorative Art in America, by Frank Fowler; A Religious Study of a Baptist Town, by Rev. W. B. Hale; Steps toward Government Control of Railroads, by Col. Carroll D. Wright; Colorado's Experiment with Populism, by Joel F. Vaile; The Great Realists and the Empty Story-Tellers, H. H. Boyesen; Student Honor and College Examinations, Prof. W. Lee C. Stevens; True American Ideals, Theodore Roosevelt; The Barnacles of Fire Insurance, by Louis Windmüller. Published by the Forum Publishing Co., Union Square, N. Y. 25 Cents a Copy, \$3.00 a Year.

A book of unique character which will undoubtedly attract more than ordinary attention is announced for early publication by S. C. Griggs & Co., Chicago. Under the title "DR. JUDAS," the author, Mr. William Rosser Cobbe, a well-known Chicago journalist has depicted with an unusually facile pen and with rare descriptive powers the terrible experience of an "opium fiend" of nine years standing. He writes from personal experience with what he aptly terms the Judas of drugs, describing, in all its phases, the mental, moral, and physical degradation of the victim, stripping the habit of its glamour and deceit, and revealing to the uninitiated the disastrous consequences of indulgence in this most dangerous of addictions. Due attention is also given to other toxic agents, as cigarettes, chloral, cocaine, hasheesh, etc. In this work the author seeks to enlighten the public respecting opium, to warn of the dangers of its employment by physicians, to enlist co-operation in effort to regulate its sale, and to assure all addicted to its use of the certainty of a complete release from its bonds. To the general reader this book will be of interest because of its fascinating literary style, while it will prove of incalculable value to the physician because of its graphic portrayal of the effects of opium upon the body; to the lawyer for the important bearing of its facts upon jurisprudence, and to the teacher as a guide in warning the young against the baneful influences of all forms of pernicious and enslaving drugs.

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The complete novel in the February issue of *Lippincott's* is "The Chapel of Ease," by Harriet Riddle Davis. It is a pleasant, peaceful story of rural life in Maryland, and of a young widow's somewhat complicated love-affair.

Francis Lynde, in "Quong Lee," shows that there are some good Chinamen. "A Precedent," by Alice M. Whitlock, narrates an unusual incident in a home for aged clergymen and widows of clergymen. In "An Idyl of the Forties," Champion Bissell points the consoling moral that men should marry the daughters of their first loves.

"The Fate of the Farmer," by Fred Perry Powers, is an instructive essay on the growing evils of agricultural tenancy. David Bruce Fitzgerald, in a brief and readable article, tells all that most people need to know about the "Diamond-Back Terrapin." Mrs. Caroline Earle White describes the festival of "Corpus Christi in Seville," and Dr. Charles C. Abbott shows what one who has eyes and a love for nature may see during "A Walk in Winter."

Under the heading, "Lingo in Literature," William Cecil Mann, a Virginian, ex

poses the blunders made by many writers, even those of repute, in trying to reproduce negro dialect. He speaks by the card and with authority on a topic which (in fiction) is usually handled in a happy-go-lucky, hit-or-miss, guess-it-will-come-out-right manner.

Annie Steger Winston discusses "The Pleasures of Bad Taste" with much acumen. "The Beginnings of a Cavalry Troop," by Kenneth Brown, is an amusing *jen d'esprit*.

The poetry of the number is by Florence Earle Coates, Carrie Blake Morgan, Edith M. Thomas, and Richard Stillman Powell. The latter pays a deserved compliment to Mr. Stanley Weyman's novels.

LITTLE ITEMS.

Iowa courts hold a physician liable for damages, for dismissing a case too soon.

Dr. J. F. Jelks, has assumed editorial control of the *Hot Springs Medical Journal*.

The new building of the Missouri Medical College is rapidly approaching completion.

In Japan, the trained nurses of the Tokio Training School, are already doing excellent service in the army.

An Austin lady through mistake gave her husband tea made from bird seed instead of flax seed, and the poor man sang all night.

A Hot Springs doctor recently sent in his bill to a lady, and the bill read as follows: "To curing your husband until he died, \$20.00,"—*Arkansas, Thomas Cat.*

Dr. J. A. McKenzie, Eldorado, Kansas, is reported convalescing from the severe injuries received Christmas night. He is about on crutches but not yet able to attend to his practice.

Mr. Hogg will soon prepare plans for a new workhouse, which was ordered done by the council at a recent meeting. The cost of this much needed structure will not exceed \$15,000.

By the will of the late Dr. William Goodell, of Philadelphia, the sum of \$50,000 is donated to the Medical Department of the University of Pennsylvania. The College of Physicians will from the same source fall heir to \$10,000.

Dr. Alfred L. Loomis, Professor of Practice of Medicine in the Medical Department of the University of the City of New York and Physician to Bellevue Hospital, died at his residence, No. 17 West Thirty-fourth Street, Wednesday morning, January 23d, of acute lobar pneumonia.

Dr. Hunter Robb, Gynecologist, surgeon and writer too well known to need comment, has been elected Professor of Gynecology, Medical Department Western Reserve University, of Ohio; fortunate college! Dr. Robb has lately written a work on "Aseptic Surgical Technique," upon which subject he is high authority.

In a recent number of the INDEX, we name Dr. Gayle as one of the new trustees of the University Medical College. We are informed that this is incorrect, Dr. A. M. Wilson, holding the chair of Materia Medica in the University was elected to fill this place, not Dr. Gale who is not connected with the college.

Mr. W. R. Ford representing Tarrant & Company, is uncorking Hoff's Extract, and explaining its virtue to the doctors of our city. The excellent reputation of his firm renders it an easy matter for him to gain an audience, and the well known virtues of Tarrant's preparations make it necessary for him to say but little in their favor.

Dr. Willis P. King, Asst. Chief Surgeon, Missouri Pacific R. R., has recovered in a great degree his good health after a year of sickness, and is again attending his practice. He operated February 21st, at the German Hospital, and is actively governing the Hospital Department of the Missouri Pacific R. R., and its hospital here. His many friends will rejoice to hear of his recovery.

Dr. E. G. Blair has taken offices at 618 and 614 New York Life Building. He very properly joins the INDEX circle and will consequently be happy.

A New Thermometer.—“I wish, Susan, that when you give baby a bath you would be careful to ascertain whether the water is at the proper temperature. Use the thermometer.” “Oh, that’s all right, mum. I can do without the thermometer. If baby turns red the water’s too hot, if it turns blue the water’s too cold. I can always tell nicely that way.”—

We are pleased to acknowledge a visit from the energetic Dr. Winn, who at present is representing Frederick Stearns & Company in their efforts to introduce Kolavin. Mr. Winn is one of the best known salesman of the south-west, and is handling a most excellent product, which the doctors all seem to appreciate. Stearns & Company are fortunate indeed in securing such a representative.

On October 8th, 1895, Dr. Hal Foster of Kansas City, exhibited to the fellows of the Academy of Medicine, a patient with the following deformity: the hard palate was perfectly natural, but on looking in his throat two uvula could be seen, each about the natural size. There was no history of heredity, and but little inconvenience from the deformity, however, he insisted upon one being removed.

The editor of the INDEX desires to acknowledge the receipt from Dr. W. C. Burke of a very kind invitation to attend the alumni meetings of the University Medical College. These meetings are held every month, and have been important factors in cementing the fellowship that exists among its members. While not an alumnus of that institution, we appreciate the invitation, as our name once appeared on the roll of its students.

We notice in a recent issue of the *Kansas City Medical Record*, an advertisement of Dr. Andrew L. Fulton its editor, Professor of Surgery in the Kansas City Medical College, who withdraws from general practice and limits his practice to surgery and consultation. Professional advertising is the order of the day, and we are indeed gratified to note the professional tone and quiet gentlemanly wording of this advertisement. Dr. Fulton has long been known as a surgeon of high attainment and sterling integrity, and we bespeak for him the cordial support of the physicians of the south-west.

Dr. W. A. McCulley, for twenty-five years a leading physician and prominent citizen of Independence, Kas., died January 23d, after an illness of over a year. Dr. McCulley was a graduate of the Ohio Medical College, and served as surgeon of the sixty-fifth Ohio infantry. While officer of the United States army he successfully treated yellow fever at Key West, Fla., being himself stricken by the disease, but recovered and again volunteered his services in 1878, during the terrible scourge at Memphis. He leaves a wife and two children.

The following item appears in the *Oklahoma Medical Journal*:—A second training school for nurses has been organized in Kansas City. Dr. C. A. Dannaker, assistant to the chair of Obstetrics in the University, and Dr. H. E. Pearse, professor of Obstetrics in the Kansas City Medical College are at the head of the new institution.

We desire to correct the above item. Dr. H. E. Pearse is not the professor of Obstetrics in the Kansas City College; that position being held by Dr. George Mosher. Dr. Pearse, holds the position of Professor of Anatomy in that college.

We have received from Charles Marchand, chemist, a book containing 170 pages, full of interesting Medical and Surgical matter, written by the best physicians and surgeons of America, describing all forms of chronic and acute suppurative disease, in which Peroxide of Hydrogen is useful as a curative agent, it is illustrated and from its size and character it becomes a valuable little reference book. If you will mention the INDEX, and write to the Drevet Manufacturing Company, of 28 Prince St., N. Y., a copy will be sent free of charge. Write for it at once.

The U. S. Department of Agriculture, Washington D. C., wishes to obtain assistance of the various Boards of Health, Sanitary Societies and Physicians, interested in the subject of climate and its influence on health and disease. No compensation can be offered other than to send, free of cost, the publications of the Bureau to those who assist. Co-operation will consist in sending to their office, reports of vital statistics from the various localities. That these reports may be of value, it is evident to all that they should be accurate and complete, and be rendered promptly and regularly. Blank forms of reports have been prepared so as to occasion as little trouble and labor as possible on the part of the reporter, and will be furnished by the Bureau on application.

The *Medical Press* says "if you have a fatiguingly deaf patient to talk to, place the ear piece of your stethoscope in the patient's ear, and talk into the chest piece, you then have an excellent ear trumpet." This is all very well, but how about the rest of the item. "If you leave your spectacles home, being old, make a hole with a pin in the corner of your visiting card, and you can read your clinical thermometer or any thing else." In the name of Optics, what effect will it have upon the eyes or the spectacles which have been left at home to punch a hole in the corner of a visiting card with a pin. Will it cause the doctor to remember his glasses? Or is he supposed to shut one eye and look through this hole? In that way is he supposed to be benefited from this "simple device."

Dr. J. W. Felty, of Abilene, Kansas, reports in the *Medical News* the case of a woman, suffering from melancholia, who unknown to her friends drove a nail into her own head. She became partially paralyzed, suffered from choreic movements of the lower extremity (left side) hesitating speech, and sluggish mental condition. It was not known at this time that the nail was imbedded in her head, but diagnosis of apoplexy was made; about six weeks afterward, the head of the nail was found in an ulcerated spot, and on removing it, it was found that the nail had penetrated one and one-half inches at a point near the coronal suture over the longitudinal sinus. She admitted driving the nail herself into her own head, and claimed Satan induced her to do it. The Doctor very properly, trephined the skull at once, as the temperature was above one-hundred. He found cerebral abscess, which he opened and drained; however, she died the third day after operation. How the woman could have driven this nail into her brain is a mystery.

We should be pleased to have the readers of the *Index* try the following suggestion in practice, and send a report when occasion offers; it is taken from the journal of the American Medical Association of January 19th.—Farrar (Obstetrical Society of London November, 1894,) has successfully employed cocaine in two cases of rigidity of the cervix in the course of labor. In the first case, a primipara, the labor has been retarded more than forty-eight hours. Chloroform had been administered without relief; intending to incise the neck, he applied a compress saturated with a 10 per cent solution of cocaine and retained it for three minutes. On examination he found that even in this short space of time, dilatation had progressed with rapidity, and the case terminated normally. The second case was a primipara 40 years of age, and there was a rigidity of the cervix which had resisted the pains for three days, and as well, all the means of non-operative dilatation. The application of a 10 per cent solution of cocaine, caused a rapid dilatation.

READING NOTICES.

RUDY'S PILE SUPPOSITORY is guaranteed to cure Piles and Constipation, or money refunded. 50 cents per box. Send two stamps for circular and Free Sample to Martin Rudy, Registered Pharmacist, Lancaster, Pa. No postals answered. For sale by all first class druggists everywhere. Woodward, Faxon & Co. and Evans-Gallagher Drug Co., wholesale agents, Kansas City, Mo.

PEACOCK CHEMICAL CO., of St. Louis, Mo., manufacture a most reliable preparation of Bromides, long noted for their efficiency and excellence. Of their Chionia, for use in biliousness, jaundice, dyspepsia, constipation, and morbid conditions caused by hepatic torpor, we can only speak in the highest terms; our opinion is based on practical use of this valuable preparation.—*Southern Practitioner*.

SANMETTO IN DISEASES OF THE BLADDER AND KIDNEY. To whom it may concern: I have been in the practice of medicine for the past forty-four years, and say without hesitation that I have never prescribed any remedy that in its action is so near a specific in diseases of the bladder and kidney as Sanmetto, and particularly in cases of urethral inflammation combined with difficult micturition. Much might be said truthfully in favor of Sanmetto in all diseases of the genito-urinary organs. I think it is the remedy for these diseases, and the best now in use.

D. CALKINS, M. D., East Lynne, Conn.

Dr. Charles Day, M. R. C. S., etc., 79 St. Mark's Square, West Hackney, London, writes, on January 17th, 1895: I have prescribed your preparation, Iodia, with very satisfactory results. Its power of arresting discharges was very manifest in a case of leucorrhœa, and another of otorrhœa. In the latter case, the result of scarlet fever in early life, the discharge had existed for many years. The patient could distinctly feel the action of the Iodia on the part, and the discharge gradually dried up.

KANSAS CITY MEDICAL INDEX,

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WHOLE No. 183.

ORIGINAL ARTICLES.

IS HAMLET INSANE?*

BY JUDGE H. C. MCDOUGAL, KANSAS CITY, MO.

President Missouri State Bar Association.

SOURCE AND HISTORY OF PLAY.

Looking backward to the sources and through the history of the tragedy of Hamlet, we are told that it is "partly founded on a work of Saxo Grammaticus, a Danish historian, written as early as 1204, but not printed till 1514." In that work, young Hamlet (or Hamblet as he is there called), it is said, "went to feigning himself mad." Shakespeare's first effort on this tragedy, entitled "The Revenge of Hamlet, Prince of Denmark," was first registered July 26th, 1602, and printed in 1603. In 1604 it was again published, "enlarged to almost twice as much again as it was" and it reappeared in, substantially, its present form, in the folio of 1623.

HAMLET'S MENTAL CONDITION.

In preparing for the limited and imperfect effort which I shall make to solve the problem—"Is Hamlet Insane?"—I have not examined any one of the many learned, elaborate and able opinions of insanity experts upon this question, either pro or con; but have given to the text such thoughtful consideration as time and opportunity permitted and formed my conclusions, in my own way, wholly unembarrassed by those others.

HAMLET'S LEGAL RESPONSIBILITY.

In the determination of the question submitted, rules which for centuries past have guided the wisdom of bench and bar in the solution of similar problems, must be kept steadily in view. Among the many definitions of classified mental unsoundness, that of the word *lunatic* seems best adapted for the consideration of Hamlet's case, viz: "One who hath had understanding, but by disease, *grief*, or other accident, hath lost the use of his reason."—Blackstone. "He who was of good and sound memory, and by visitation of God lost it."—Coke.

*Paper read before the Shakespeare Club at Kansas City, Mo., January 9th, 1895.

Law books agree "that *immovable* delusions as to facts past or present, is not merely a *symptom* of insanity, but is in fact insanity or the effect of unsoundness of mind."—11 A. & E. Enc. of L., 107.

"A *delusion* is a belief in *facts* the existance of which *no rational* person *would believe*. * * * Must be a delusion of the *senses* or such as concern certain facts."—Id.

And "the *test* of insanity is the presence of *delusion* in the mind of the subject."—Id.

The foregoing rules apply to both civil and criminal responsibility; but in the application of rules in cases distinctively criminal, we have the following:

"There must be a disease which *impairs* or *totally destroys* either the *understanding* or the *will*."—4 A. & E. Enc. of L. 716.

"If the accused knew what he was doing and that the act was prohibited by law, and had power of mind enough to be concious of what he was doing, he is responsible."—Id. 717.

"A party acting under the influence of an insane delusion, with a view of redressing or *avenging* some supposed grievance, or of producing some public benefit is, nevertheless *punishable*, if he *knew* at the time, that he was acting *contrary to law*."—Id. 719.

To my mind this case must turn upon two points: First:—After his first talk with his father's spirit, Hamlet tells Horatio in effect that he intends to feign madness. Is this fact admissible in evidence in his favor? No; for the reason that while one's statements and admissions against himself and his interest are always admissible in evidence *against* him, yet no one is permitted to manufacture evidence in *his own favor* by first making statements and thereafter proving that he did make them. In other words, all he says against himself may be proven against him, but the rule is otherwise, and justly so, as to all he says in his own favor. Second:—Hamlet alone heard and talked to the Ghost. The first time his three friends see it, but hear it not; the second time it appears and talks with him in the presence of his mother, yet she neither sees nor hears it. Under these facts, therefore, neither the Ghost, nor what it said can be put in evidence, for the evidence of disembodied spirits was not recognized by the Courts in that day any more than in this. Hence under the letter of the law, upon either a civil or criminal trial, the evidence of his intention, as given Horatio, as well as what the Ghost said and did, must be excluded.

But from the time of Samuel and Saul (see Samuel XXVIII.) down to Hamlet and on down to our own day and generation, men and women of rare sense, judgment and honesty have as firmly believed in the materialization and talk of spirits of the dead as in the existance of any other fact. Whatever these manifestations may be to others—however meaningless—yet to that class of persons these things present themselves as *facts*—and who, without *knowing*, shall say they are not? Yet there has been and is no pretense that these people are not wholly responsible civilly, and criminally. As Shakespeare puts these two points in evidence, however, and as Hamlet fully intended the first and firmly beleived in the second—for after the play he gives the same credence to the Ghost as he does to Horatio—I think it but fair to the Master, and fair to the

treatment of the subject, to give full faith, credit and effect to both intent and Ghost, and with these in evidence, my conclusion is that Hamlet, although at times desperate and melancholy, is civilly and criminally liable for all his acts, and, therefore, not insane. While any other view leaves Hamlet before the court as a madman, yet to my mind the strongest indication, and evidence too, of his insanity, is found in his wild, unreasoning talk at and in leaping into dead Ophelia's grave—yet love, jealousy, grief and remorse may well account for all that.

With the Ghost in evidence, Hamlet labors under no delusion—to him it is a *fact*. In determining the validity of wills, civil contracts and the like, the question is: Did the party pleading the disability of unsoundness of mind, have sufficient mental capacity to comprehend and understand the nature of the act in all its scope and meaning? A shorthand statement of the test in criminal cases is: Did the party at the time know right from wrong? Had either of these questions come up in this case, the answer would have been in the affirmative, and especially in the latter, for there "the insanity must have been such as to *prevent* the accused from distinguishing between *the right and the wrong* in the particular act."—4 A. & E. Enc. of L. 715.

One may be mentally unbalanced at times, yet of sound mind at others. Hamlet knows that his father has been most foully murdered by his uncle and thirsts for revenge; yet two considerations deter him from wreaking summary punishment: First:—His father's spirit charges him that howsoever he pursue the act, yet he must neither taint himself, nor harm his mother: Second:—"He craves, as every good man must crave, to have his name sweet in the mouths, his memory fragrant and precious in the hearts of his countrymen."—Hudson.

Until after the play representing the murder of his father, he does not know but some degree of guilt rests upon his mother—he must not, will not, in any way involve her. Again, he has no proof of the King's guilt under which he can justify taking his life, until that "occulted guilt" is made manifest by the effect which the play has upon the King. Contrive as he may, yet up to that hour he is terribly handicapped by the Ghost's charge to which he has given assent.

From the first he is satisfied that something is wrong; but what or just how to uncover the guilty and mete out punishment, are matters of slowest unfoldment.

During this development, whatever he was or may have seemed to others, yet in the presence of his known truest and best friend, Horatio, Hamlet is, with but a single exception, always apparently in his right mind. This exception occurs just after coming from his first and most important interview with the Ghost. In the intense excitement of that hour, Hamlet utters such words as call forth from Horatio this mild rebuke:

"These are but wild and whirling words, my lord."

But put yourself in his place—study the situation with care—and then tell me what man among you—clothed in your right minds as you always are—could and would have answered and talked with better sense and judgment than on that occasion does Hamlet?

By reason of the sudden and mysterious taking off of his father—his just suspicions of the King's complicity therein—the shameless haste in which his mother marries his uncle—Hamlet's mind is wrought up to the highest pitch—he is humiliated, morose, melancholy at times, yet look at the situation:

Young, talented, schooled in the arts and sciences, heir apparent to the throne, proud, sensitive, gentle and but thirty years of age, Hamlet returns from school at Wittenberg presumably to attend his father's funeral, remains an unwilling witness to his mother's second wedding, which so swiftly follows the burial of the father—King that

“the funeral baked meats
Did coldly furnish forth the marriage tables”

He intends to return, but for some undisclosed purpose of his own the King beseeches him

“to remain
Here in the comfort and cheer of our eye,
Our chiefest courtier, cousin and son.”

To this appeal, his mother adds:

“Let not thy mother lose her prayers, Hamlet :
I pray thee, stay with us; go not to Wittenberg.”

Hamlet answers:

“I shall in all my best obey you, mother”

and so remains at the court, where of necessity he daily notes the wide difference between his noble, generous, manly, courageous, loving soldier-king father, and the fawning, drunken, murderous usurper now in his place; and where he is daily reminded too, of the fall and frailty of his once good mother.

Brooding over these changes, and the wrong to himself and his mother, which his sensitive soul so keenly feels, the wonder to me is that he retained sufficient mental power and self control to feign madness as a cloak to assist in unravelling the mystery and avenging the crimes against himself and the State. And yet, considering his predetermination to do this very thing; by bringing the Ghost into court as a living, breathing, talking, reasoning man of flesh and blood—and Hamlet evidently so comes to regard and trust it—my judgment is that he acts a part, for a purpose; knows and understands, from the beginning to the end, the full scope and meaning of every material act and word.

THE GHOST.

Let us briefly trace the Ghost through the play and note the effect which it has upon the actions of Hamlet:

In the first act, Marcellus and Bernardo, officers, while on the watch, twice see the Ghost. On the third night they call in Horatio

“That, if again this apparition come,
He may approve our eyes and speak of it.”

On that night all three see the Ghost

“In the same figure, like the King that's dead”

and Horatio challenges and attempts to talk to it; but his ghostly majesty, as if offended, stalks away. Later, however, on that same night, it reappears, Horatio again implores it to speak, and it seems about to do so, when again

“It faded on the crowing of the cock.”

After a discussion of the mystery, Horatio makes the suggestion :

“Let us impart what we have seen tonight
Unto young Hamlet; for, upon my life,
This spirit, dumb to us, will speak to him.”

Acting upon this suggestion, they separate; but later in the day all three meet and discuss the Ghost with Hamlet, who agrees to meet and watch with them on that night. After the others make their exit Hamlet soliloquises :

“My father’s spirit in arms ! all is not well;
I doubt some foul play; would the night were come !
Till then sit still, my soul. Foul deeds will rise,
Though all the earth o’erwhelm them, to men’s eyes.”

Hamlet, Horatio and Marcellus appear upon the platform at midnight

“The air bites shrewdly; it is very cold.”

“It is a nipping and an eager air.”

but the three friends wait and watch until the Ghost appears, and to it, in a frenzy of hope and fear, doubt and dread, Hamlet appeals in language most touching, saying :

“Angels and ministers of grace defend us !
Be thou a spirit of health or goblin damned :
Bring with thee airs from Heaven or blasts from Hell.”

* * *

“I’ll call thee Hamlet,
King, father: royal Dane, O, answer me.”

No answer comes, only a beckon, and Horatio to Hamlet says :

“It beckons you to go away with it,
As if it some impartment did desire
To you alone.”

Against the protest, and even force, of his two friends, Hamlet goes with the Ghost, and when the two are alone, out of the sight and hearing of the others, the Ghost, speaking to and being understood by Hamlet as his “father’s spirit,” unfolds in all its fearful details, the circumstances of his murder by his brother, the now King, and exhorts his son to

“Revenge his foul and most unnatural murderer.”

Yet gives the Ghost this caution :

“But, howsoever, thou pursueth this act,
Taint not thy mind, nor let thy soul contrive
Against thy mother aught: leave her to heaven,
And to those thorns that in her bosom lodge,
To prick and sting her.”

Hamlet assents to all this. Then the first thing he does upon rejoining Horatio and Marcellus is to swear them to secrecy.

Later on, in that stormy interview with his mother (Act III. Scene 4) the Ghost again appears and converses with Hamlet, but the mother neither sees nor hears it; nor do Hamlet’s three friends, who actually see the Ghost, ever hear it utter one word, save “swear” when Hamlet demands that they shall swear that they will

“never make known what you have *seen* tonight.”

Hamlet, then, as theretofore, both *sees and hears*, and at the close of the first conversation, says to Horatio :

"Touching this vision here,
It is an honest Ghost, that let me tell you."

He afterwards has his doubts of this, and even after arranging with the players to reproduce the scene of his father's murder, as his father's ghost gave that scene to him, he says to Horatio :

"One scene of it comes near the circumstance
Which I have told thee of my father's death.
I pr'y thee when thou seest that act afoot,
Even with the very comment of thy soul
Observe my uncle: if his occulted guilt
Do not itself unkennel in one speech,
It is a damned Ghost that we have seen :
And my imaginations are as foul
As Vulcan's stithy."

But when that scene is reproduced with such powerful effect upon the startled, guilty King, Hamlet doubts no longer, but with the assurance of positive conviction exclaims :

"O good Horatio, *I'll take the Ghost's word for a thousand pound.*"

No one present, save Hamlet and Horatio, appear to note anything unusual in either the King's conduct, nor in his manner of leaving the play; yet to Hamlet the King's countenance and demeanor are *proof positive* that his father's spirit has told him truly. and that the King, in manner and form as described, murdered his father by pouring poison into his sleeping ear. That problem solved to his satisfaction, all else is clear.

While the sudden death of his father, the hasty marriage of his mother and the King's greedy assumption of the reigns of government, have combined to produce upon the mind of the thoughtful, studious Hamlet a feeling of profound shame and melancholy, and while the state of his mind is often under discussion in and out of court and he is urged to throw off his melancholy, yet it is a highly significant *fact* that no one suspects him of madness until *after* his first talk with the Ghost.

Another significant fact, and to me a controlling one, is that *after* learning from the Ghost all the details of his father's murder, and being urged to revenge the same. Hamlet makes up his mind that the best way to attain the desired end is to feign insanity. Hence on that very night, he has Horatio and Marcellus swear that

"*How strange or odd soe'er I bear myself—
As I perchance hereafter shall think meet
To put an antic disposition on—
That you, at such times seeing me, never shall,
With arms encumber'd thus, or this head-shake,
Or by pronouncing of some doubtful phrase,
As Well, well, we know, * * *
Or such ambiguous giving-out, to note
That you know ought of me.*"

From this time on, in season and out—except when talking with his trusted friend, Horatio—with craft, skill and ability, Hamlet seeks to impress upon all the fact that his mind is unbalanced. In his self communings are frequent references to his mental condition, he often publicly proclaims his madness, yet

when his faith in the Ghost, his thirst for revenge without either soiling his own good name or bringing further shame upon his mother, are all considered, to me it seems that Polonius was right in saying

"Though this be madness, yet there is method in't."

This view is strengthened in considering the pathos of the tragic

CLOSING SCENE.

Horatio is Hamlet's life long friend—tender, considerate, and true,—the Master's manliest creation. Throughout the play are frequent expressions of utmost trust and confidence in Horatio. To him Hamlet reveals his purpose in the beginning, and the two stand shoulder to shoulder throughout the entire tragedy.

Hamlet has used every effort to avenge his father's death and at the same time obey the injunctions of that father's spirit not to taint himself nor contrive against his mother aught. To accomplish this end he deemed it best to feign madness. All this Horatio knows. With the pride of royalty and true manhood, Hamlet's dying desire is that his countrymen shall know the truth; that they shall read his life as an open book and understand himself and his motives as they in fact *were*—not as they *seemed*. With this in view, from out the gathering mists of death he calls to that faithful, trusted friend and charges him with the duty of unfolding the truth, in the significant sentence.

"Horatio, I am dead ;

Thou livest, *report me and my cause a-right*

To the unsatisfied."

Realizing that his life story is "*unknown*, with his last breath, he reinforces this charge by saying :

"O God, Horatio! what a wounded name,
Things standing thus *unknown*, shall live behind me!
If thou didst ever hold me to thy heart,
Absent thee from felicity awhile,
And in this harsh world draw thy breath in pain,
To tell my story."—

The far off march and the warlike volley of young Fortinbras, came from Poland, arrests the dying man's attention, cuts the sentence short; yet of Fortinbras to Horatio he says:

"he has my dying voice;
So tell him, with the occurs, more *and less*,
Which have solicited—The rest is silence."

The poison has done its work—the music of the dying lip is hushed—the last two sentences must forever remain incomplete!

"Ah who shall seize the wand of magic power.
And the lost clue regain;
The unfinished window in Alladin's tower
Unfinished must remain."

With bursting heart, the good Horatio gazes upon the body of his dead friend. He knows the life and life story of Hamlet as does no one else. By no word, act or look of his, is it anywhere intimated that upon the rare mind of his deeply wronged, dearly beloved Prince there rests the faintest shadow. He knows. No one else does. And, with the dying charge—"report me and my

cause aright"—"tell my story"—ringing in his ears, this noble, lifetime friend murmurs:

"Now cracks a noble heart.—Good-night, sweet Prince;
And flights of angels sing the to thy rest."

THE TREATMENT OF GALL-STONES AND GALL-STONE COLIC.

BY HERMAN E. PEARSE, M. D., KANSAS CITY, MO.

Professor of Anatomy, Kansas City Medical College.

Among the patients who come to me for painful stomach troubles, quite a large class state that they have suffered periodical cramping pains in the stomach and right side. They say that the pains "almost take their breath." They are frequently so severe that the perspiration stands in great beads upon their skin. They say the attacks come on without warning; that they last until relief is obtained. They feel sure that it is some disease of the stomach, because soon after the pains begin, a severe spell of vomiting comes on. They sometimes think they are "bilious" (what-ever that may mean) because they vomit greenish colored mucous or yellow bile.

Upon inquiry, they will generally state that the skin turns a little yellow after each attack; that their stomach is sore, and whole abdomen tender; and in short they say that they have a slight attack of jaundice. It is well to state here, a fact that I have previously and often spoken of, but which cannot be too often or too forcibly repeated, namely: that the stomach itself is not often the source of disease. Much more frequently is it injuriously affected by disease existing in some other organ. The class of cases described above are due to calculi or gall-stones, which have been formed in the gall-bladder, and are of small enough size to pass out, and yet too large to slip through the entire length of the ducts with ease.

The channel leading from the liver to the intestines is known as the hepatic duct. It is joined to the duct leading from the gall-bladder, known as the cystic duct. The two unite like the branches of the letter Y the liver being on one tip of the Y, the gall-bladder at the other tip, while the stem of the Y forms the common bile duct, and opens into the intestine. During free secretion a portion of the bile flows down the cystic duct and accumulates in the gall-bladder, and there to remain until the flow from the liver lessens, when it retraces its way through the cystic duct, out through the common duct into the intestine. The calculi form in the gall-bladder; and it will be seen at once, that when escaping, if the stone lodges in the cystic duct, the bile can still pass into the intestine from the liver; and the cramping pains are not followed by much jaundice. If however, the stone goes through the cystic duct and lodges in the common duct, grave jaundice follows at once, as none of the hepatic secretion can find an outlet.

Symptoms of this trouble are, cramping pains in the right side at the edge of the ribs. They may radiate to the stomach and through the bowels. The pains are so intense that the patient's life seems threatened; profuse perspiration breaks out; the body is bent upon itself; and the patient in his agony begs for relief from all who may be near him. Soon cramping ceases for a moment and

a slight rest is obtained, only to be repeated again and again. The termination may be one of several ways: inflammation and death from peritonitis may follow, or the stone may pass safely through the ducts, and drop into the intestine, or may be worked back into the gall-bladder, or, the duct adhering to some neighboring viscus, the stone may ulcerate its way through and escape by some other channel.

The treatment consists in applying to the side large hot poltices, frequently renewed; in the administration of anodynes; and from the great pain and vomiting, it will generally be found that nothing short of morphine in large doses will be sufficient. It is best given in doses of one-fourth to one-half of a grain in combination with atropine 1-150 of a grain. This should be given hypodermically. Care should be taken not to have the patient too deeply under the influence of morphine, as the stone might suddenly drop through the duct into the intestine, when the pains suddenly ceasing, our patient would be in danger from the excess of morphine in the system. Hence it is better to give the dose mentioned, and resort to chloroform by inhalation to quiet the pains until the anodyne takes effect.

The second point in the treatment is the reduction of the inflammation caused by the stone, after the pains have been removed. For this purpose regular doses of from fifteen to sixty grains of the phosphate of soda should be given each morning in a glass of water, and the dose increased or diminished according to its effect; the aim being to produce a slight laxative result. A remedy which is highly spoken of in this connection, is the fluid extract of dioscorea or wild yam,* in doses of from ten to fifteen drops given during the pain to relieve it, and between times to cure the trouble.

The third step in treatment is the surgical operation for the removal of the stone. To render the operation safe the patient must be in surroundings suitable for abdominal section, preferably in a first-class hospital. The operator must be prepared with sutures, instruments, rings, Murphy buttons, etc., ready to do any operation, such as resection of a portion of the bowel, anastomosis, artificial opening between the gall-bladder and the bowel, which the necessity of the moment may direct when having opened the cavity of the abdomen he is confronted with the complication that exists there.

The following indications for opening the abdomen and exploring the gall-bladder by Alex. Hugh Ferguson, M. D., of Chicago, in the Journal of the American Medical Association of January 19th, fully cover the ground

1. For attacks of biliary colic accompanied by distended gall-bladder which suddenly subside and no stone is passed. The stone has dropped back into the bladder and will attempt its escape again.

2. For repeated attacks of biliary colic where the bladder becomes enlarged and jaundice follows. A stone is lodged in the ducts, and must be removed to obtain relief.

3. For persistent tenderness over the gall-bladder. The interpretation of this sign is that a subacute inflammation has been set up by the irritation of a stone. Such cases have a history of colic, and the results are apt to be gangrene

The Wm. S. Merrell Chemical Co., of Cincinnati, furnish an excellent article of this drug.

of the gall-bladder, ulceration (with perforation, causing peritonitis,) or cancer.

4. For persistent and marked enlargement. Such may indicate that the gall-bladder contains:

1. A large number of stones or several very large ones.
2. Much mucous.
3. Large accumulation of bile.
4. Mixture of the two above.
5. That a growth, cancer or tumor, is invading its walls.

Three operations are open to us, and each should be undertaken according to its own nature.

1. Cholecystotomy, cutting open the gall-bladder and removing the stones from bladder and ducts and closing again, with or without a period of drainage.

2. Cholecystectomy, removal of the gall-bladder entire with its ducts and contents, advisable only in cases of tumor, cancer, ulceration or gangrene.

3. Anastomosis of the gall-bladder with the intestines.

This is to be done when the gall-bladder contains much material including bile, and after evacuation an opening cannot be established between the gall-bladder and the intestine *i. e.* permanent obstruction of common ducts. It is easiest accomplished by means of the Murphy button.

In conclusion I would state that the choice of the above operations, must be made by the surgeon at the time of operating and must be varied to suit the individual case. Do not neglect your cases of biliary colic. The patient's life may pay the forfeit. Do not defer operation upon a gall-stone case too long. The patient's good is best subserved by early operation.

SOME NOTES ON RECENT SURGICAL LITERATURE.

BY EMORY LAMPHEAR, M. D., PH. D., ST. LOUIS, MO,

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EARLY REMOVAL OF CANCEROUS UTERI. For a considerable time Cordier, of Kansas City, and myself, have made numerous and earnest pleas for early removal of the uterus in all cases where there is even a suspicion of malignancy. I have made exhibition of a number of specimens of early cancer of the uterus showing involvement of the body when the cervix appeared normal, and have urged hysterectomy in all cases where there is a possibility of malignant disease, claiming that many lives may thus be saved. It is therefore a satisfaction to read the article in which Godart (*Bull. de la Soc. Belge de Gynéc. et d'Obstét.*, No. 1, 1895) relates two cases where Jacobs removed the uterus for this disease. Both patients recovered from the operation, the first taking place on February 7th, 1894, the second on October 3rd. In both cases the patients had borne several children, and had frequently miscarried. One was 20 years old, the other 40. Menorrhagia occurred in both. Primary cancer of the body of the uterus was until recently held to be very rare. Now that the microscope is freely used, so that gynecologists understand the normal and morbid histology of the uterine tissues, the disease in question is often detected. Godard makes the important observation that the curette is not a sure instrument for diagnosis.

The scrapings in the above cases only displayed the appearances seen in chronic endometritis, with alterations in the glands. Diagnosis can only be made if tissue belonging to the muscular wall is scraped away. The presence of columns of epithelial cells in the muscular coat, the nuclei undergoing division, is the most distinctive appearance in cancer of the body of the uterus.

THE MURPHY BUTTON CONDEMNED.—König, of Göttingen, does not favor the use of the Murphy button. In an interesting article (*Centralblatt für Chirurgia*, No. 4) he says that while he recognizes the fact that modern methods of establishing intestinal anastomosis by bone plates, metal buttons, etc., favor rapidity of operation, he believes that a prolonged laparotomy does not lead to shock. He states that in the many operations he has performed for intestinal resection and anastomosis he has never met with an instance in which death could be attributed to shock. For this reason he is not disposed to substitute for older and safe operations, which may take some time in their performance, rapid methods the safety of which seems to him to be doubtful. That the use of Murphy's button may serve to extend the practice of resection, and thus enable inexperienced surgeons to perform these operations, is regarded as being, as far as the patients are concerned, rather a disadvantage than an indication of advance. In his conclusion that prolonged laparotomies do not lead to shock König is supported by a large proportion of his German confreres. But the experience of Tait and Price, and of other English and American operators is almost universally in favor of rapid work. In my own sections the very best results have been obtained when extraordinary rapidity was possible; if the abdomen is open more than thirty minutes there is considerable danger; and exposure of peritoneum for an hour means death as a rule.

A NEW METHOD OF TREATING CONGENITAL DISLOCATION OF THE HIP. Mr. Arbuthnot Lane, recently presented at the Clinical Society of London, two patients upon whom he had operated by a new method. This consisted of removing the head of the femur from its movable position on the dorsum ilii to a secure position below the anterior inferior spine of the ilium, to which it was sewn, with the result that the lordosis was lessened, and the walking powers of the patients were increased to very little below the normal. The advantage will not be equally great when there is a double dislocation. The operation is not intended to supplant that of replacing the head of the bone in the acetabulum whenever that is feasible.

INJECTION TREATMENT OF PSOAS ABSCESS.—At the same meeting Dr. Barker (*British Medical Journal*, Feb. 16,) exhibited a case of Pott's disease in which he had operated for psoas abscess several months before. After washing out the cavity thoroughly with water sterilized by boiling, he injected a quantity of iodoform emulsion. The patient had no recurrence, and is now as well as possible with an angular curvature of the spine. In another case with cervical caries there had been no trace of recurrence of the abscess, which had been opened and treated in a similar way in June last. These cases go to prove the efficacy of such treatment when the abscesses have not yet discharged. When, however, sinuses have formed, there is no rational treatment except laminectomy; a method I have successfully followed in a number of cases.

SURGICAL ASPECTS OF APPENDICITIS.—In the *Medical News* of January 5th, 1895, Dr. John B. Murphy, Professor of Surgery in the Chicago College of Physicians and Surgeons, reports 194 operations for appendicitis in his own practice, with a mortality of 9.6 per cent. From this extensive and successful experience he deduces the conclusions that he would never delay operation even if a case were progressing favorably and on the other hand, would not shirk the risk of operating on the most dangerous cases. The following outline is given of the various conditions found in operating for appendicitis: (1) When the abdominal wall is infiltrated and the abscess is opened without opening the unaffected portion of the peritoneum, there may be (a) a small circumscribed abscess with the appendix forming part of the wall; (b) a small abscess with a track leading to a deep seated larger abscess; (c) a large abscess filling the iliac fossa, containing faecal concretions or a gangrenous appendix floating in the pus, closed in by firm adhesions; (d) there may be multiple abscesses with no connecting sinuses—a rare condition; (e) there may be an abscess in the opposite side of the abdomen. In other class of cases, when the peritoneum is opened and no adhesions to the anterior abdominal wall are found, a circumscribed abscess may exist in the posterior wall of the abdomen, the appendix and pus being enclosed within adherent omentum and intestine. This is the most common condition found in the early stage. In such cases the field of operation should be thoroughly protected by careful packing with iodoform gauze. The adhesions should then be separated, the pus sponged out, and the appendix liberated from its adhesions, and be ligatured and removed. Whenever the peritoneal cavity is opened directly the appendix should be removed. In another class of cases the peritoneal cavity will be found to contain a large quantity of free pus with no limiting adhesions, and the bowel may be smooth and glossy. All these cases recover. On the other hand, the bowel may have a livid and blistered appearance and be much distended. The great majority of such patients die. In either of the cases mentioned the appendix is usually gangrenous and perforated. Extensive drainage should be employed in both instances, and irrigation must be avoided. In some cases there is a small quantity of pus around the appendix, with partial adhesions protecting the peritoneum. This condition may be caused by perforation of the appendix; by gangrene of the mucous membrane without perforation; by a simple non-perforating ulcer of the appendix; by accumulation and retention of muco-purulent fluid in the appendix, with only an abrasion of the mucous membrane of that organ. All the acute symptoms of appendicitis may be produced by tuberculous and typhoid ulcers of the appendix without perforation or infection of the peritoneum. In another class of cases the canal of the appendix is partially or completely obliterated, or sufficient stenosis of the canal is produced to cause retention of material at the distal end, and to give rise to recurrent attacks. In such instances removal of the appendix during a quiet and intermediate stage is indicated.

Milk will absorb the odor of all volatile substances if vessels containing each are placed near each other. This, then would suggest that milk remaining long in a sick chamber should not be drunk.

NECESSITY OF THOROUGH EXAMINATION OF THE URINE.

BY G. A. MCBRIDE, M. D., FORT GIBSON, IND. TER.

The subject that has been assigned me for consideration is one to which I believe the medical profession as a general rule does not attach the importance it demands. There are but few diseases but what affect in some way or other the urinary organs. This, coupled with the fact, that accurate diagnosis in many diseases is only made upon the discovery of certain pathological conditions of the urine, is sufficient to render frequent urinalysis of great importance. Whether it is for the want of time, or for more painstaking in the examination of diseases that we permit this valuable agency in determining the cause of, condition, or even the disease itself, to go uninvestigated, I am unable to say. Aside from an occasional examination in diabetes, albuminuria, and occasionally of the urine of pregnant women, I believe it is safe to say that the majority of us, give the matter no farther consideration. None of us, but what comprehend that it is of the utmost importance in the practice of medicine, that the various pathological factors that have caused or that complicate the disease we are called on to treat, be accurately estimated.

I presume that most of the physicians representing this body recognize malaria as the great factor in producing or complicating the majority of the diseases we are called to treat, for the practice of most of us is confined to malaria infected districts or bordering on them, hence antimalarial remedies enter largely into the treatment, but I have realized more and more as the years of my work go by, that there is another prevalent factor in the causation of disease that has been almost entirely overlooked by the vast working body of the profession, namely, the accumulation of uric acid in the system, some of my remarks on uric acid may be foreign to my subject, yet I hope not entirely out of place.

Uric acid is not an abnormal formation or a pathological condition. Its daily elimination amounts to about eleven grains. It is a product of tissue change, a tissue transformation, and its elimination can not be entirely prevented. When the daily productions of uric acid exceeds eleven grains, or the daily elimination falls short, there is a corresponding accumulation of it in the system. We are confronted with a pathological condition of the system, the patient is given the usual physical examination, and we will say that we have found a furred tongue, dry rough skin, constipated bowels, high temperature, rapid pulse etc., he is usually told that he is full of malaria, and we give him an anti-malarial treatment, and feel that we have done our duty. Nature may rally her forces and assist the patient back to health, and the doctor gets the credit for aiding nature, when if the truth was known, his patient would have gotten well quicker had he never called at his office, for he did not direct his remedies towards the cause of the disease, and why? He did not know the cause, and why? He did not realize the importance of a thorough examination of the urine. Had he examined this, he would have found an over production of uric acid, which was poisoning the system, or it may be, he would have found a deficient elimination which is just as pathological. There are many symptomatic

manifestations of uric acid that can not be easily overlooked. We know that it is a chemical irritant, and hence none of the sensitive membranes of the body are free from its irritation, in addition to that it may be present in such quantities as to form salts and deposit in the tissues, and thus become a physical irritant; it may thus produce the various grades of irritation up to active inflammation, often the hidden cause for unaccountable irritation and inflammation is revealed by the discovery of the presence of uric acid.

Cases of subacute rheumatism, various pains in the muscles and joints, periodic headaches, are often none else but manifestations of uric acid. Epilepsy, neuralgia, and other nervous and mental manifestations are often traceable to the same cause. The result of the examination of the urine gives us the key to the situation and we do not have to go through the category of remedies usually employed, but can direct our treatment to the proper cause. I remember to have had a case of pruritus ani, for which I unsuccessfully used all the remedies generally employed, until I discovered upon examination of the urine that the main cause in originating and maintaining the disease was an excess of uric acid, produced by excessive smoking and drinking, habitual constipation, and unreasonable hours. These bad habits being corrected and the patient put on an alkaline treatment soon corrected the trouble. I shall now refer briefly to the necessity of examinations of the urine with reference to albuminuria.

Albuminuria simply means albumen in the urine, and we are not to conclude that in every case in which we find albumen we have a case of Bright's disease, for we know that albumen in excess is found in many diseases. For example, most of the fevers, infectious and noninfectious, rheumatism, dysentery, extensive burns and even pregnancy; but the degree varies not only in quantity but in its persistency. The quantity and the persistency of it are regarded as a diagnostic feature of many diseases. A well qualified physician near me was called to treat a case he diagnosed to be roseola; there was conjunctivitis, photophobia, inflammation of the throat, etc. His patient failed to improve as he expected, the throat trouble grew worse and the tumefaction of the cervical and suboccipital glands more severe; consultation was called, a specimen of the urine was examined and found loaded with albumen; he had a case of scarlatina. Had he made repeated and thorough examinations of the urine he would have been better prepared to diagnose the disease and tell the probable termination. In roseola, disorders of the kidneys seldom occur; in scarlatina, always found and the urine loaded with albumen from beginning to end. I have said that malaria is the great mischief maker directly or indirectly of most of the diseases we are called to treat, and many times will we find albumen in the urine when there is no organic disease of the kidneys existing.

Another case:—Patient about 35, mother of five children. Saw her first in confinement after which she did well for twenty days, when she began to have fever. In my absence another physician was called, who informed her she had child bed fever, and among other things ordered hot uterine douches. On my return was called to see her, an examination of the urine showed it to be heavily loaded with albumen. She was put on calomel, seidlitz powder and quinine; she made rapid recovery and there has been no return of the malarial fever or albumen since.

Is it not a fact that in most all cases of malaria we will find albumen in the urine? Is it not possible then that many so called cases of Bright's disease are nothing more nor less than malaria? Apropos to what has been said, we think it germane to the subject, although we may be adjudged guilty of digression, to refer, in this connection to the causes which lead up to Bright's disease, or more properly stated, diseases of the kidneys, since the term Bright's disease has lost the restricted sense in which it seems at one time to have been used.

May we not reasonably infer, and is it not logical to conclude that the universal presence of albumen whether occasioned by scarlatina, or what not that comes in as a disturbing factor, an irritant to the kidneys that calls for extra exertion and a consequent tissue change with increased secretions, exfoliation and breaking down of the epithelial cells, is a sequel of the increased work thrown upon them? We know that in some diseases the kidneys are called upon to do extra duty by reason of the emunctories of the skin being closed and hence the fluids that would otherwise find egress by this agency must find an exit through other channels with the effect of increasing the labors that much more of both the kidneys and the lungs. In keeping with this idea which becomes almost proof positive, we would again call your attention to the quantity of albumen present in the urine in scarlatina where the emunctories of the skin for the time being, may be said to be entirely closed, calling for the increased work of the kidneys.*

Before closing my remarks I wish briefly to refer to the importance of urinalysis in malarial hæmaturia; this one subject alone should be of lengthy consideration, but I can only refer to the fact that often we could determine the disease in its incipency by examining the urine for blood.

We do not understand why urinalysis should be looked upon as being of secondary importance, and by the average physician thought to have but little diagnostic value. In this feature of diagnosis the profession would seem to have retrograded and relegated so important an element in studying disease to the itinerant and quacks who are shrewd enough to in many ways profit by it.

AFTER-CARE OF A LAPAROTOMIZED PATIENT.†

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It is presumed you have been thorough and clean in doing your work, your instruments thoroughly boiled and cleaned in the best manner, and that you have carried out all the details that I advised in other lectures. Now, how are you going to manage the case? This is pertaining to any operation in the peritoneum. It must vary to some extent when the operation is on the

*Perhaps in no case could our point be better illustrated than in that of pregnancy, where the presence or absence of albumen becomes a diagnostic symptom, and its presence no indication or symptom of diseased action but per contra an evidence of conjugal relation or connubial bliss. Here the irritation is largely mechanical, due to direct pressure occasioned by the fetus, this together with the debris that has to be eliminated by the kidneys—incidental to gestation—are sufficient to account for the albumen found in the urine.

†Lecture delivered January 26, 1895, reported by Dr. Wm. Lothian.

gall bladder, etc., but the essential points are the same. Your stitches have been put into the wound, the dressing put on, and the patient ready to leave the table. I would advise, if the patient has been in a warm operating room, and has to go down a long hall, wrap her up well before leaving the room, not only the body and limbs, but the face and head; because if the temperature is 80 to 90 degrees in the operating room, the patient being taken into a much lower temperature in a state of perspiration, it will have a tendency to increase the shock. You must keep the patient warm, you must have a trained nurse that knows what to do. It is presumed you have told the nurse to have hot water bottles in the patient's bed, so that the patient will be placed in a warm bed. I tell them not to have the bottles hot enough to burn. If burnt from a hot water bottle, they will have nothing but a superficial burn, apparently, but in two or three weeks a large slough will drop out, and these sores are very annoying to the patient, and to the operator. You place the patient in bed with hot bottles. Never place bottles so that they will come in contact with the skin, but have flannel, several thicknesses of a sheet or covering of some kind between the patient and the bottles.

If she has suffered from shock, give strychnine; do not rely on whisky. I would have you to give as much as 1-20 grain to begin with. In three fourths of an hour increase that to 1-10 grain by giving 1-20 grain more. Use the sulphate or nitrate of strychnia. I have given the 1-6 of a grain, or until I get twitching of the muscles. This amount will give the patient's heart strength, and will reduce the pulse. As you know, they will have dilated pupils, blanched appearance of face, and pulse will run from 120 to 170 or 180, if much shocked. If the patient has had great hæmorrhage, use one pint of a saline solution. In the absence of a transfusion apparatus, have a large syringe that will hold several ounces, and inject into the cellular tissue, two or three ounces in the side, four or five in other localities, in order that the heart may have something to work on. This is the way to deal with shock. Of course you have raised the foot of the bed so that the medulla oblongata has received sufficient blood supply to keep the heart and lungs going.

If the patient suffers great pain, (and they frequently do, especially in operations requiring the removal of both appendages, etc., the taking up of the slack, and compression of the nerves by ligatures cause the most intense pain); she will call for something to ease the pain when she comes out from under the influence of the anæsthetic. Tell the patient before the operation, that she is likely to have considerable pain following the operation, and that you do not give anything for that, as it is best not to; and that if she can possibly stand the pain, you would advise her to do so. They anticipate this, and will accept your reasoning much more readily. If it does become necessary for you to give something to relieve the pain, do not give morphine, as it dries up the secretions, increases thirst, brings on constipation, and has a tendency to produce vomiting. Give phosphate of codine. This is one of the preparations of opium that has none of these disagreeable features. Give as much as one-half grain hypodermically. In an hour you can repeat this, if the patient is suffering. Now, if you can persuade the patient to tolerate the pain, have her do so; she

will be better off in the end. You may have to continue the codine every three, four or five hours. I sometimes give hypodermics of water. I have in a number of cases given pure water; it makes them feel as though you were trying to do something for them; and I tell them this is as large a dose as they can stand without danger, and they will quiet down and be satisfied with the result. After you have given strychnine up to 1-10 grain immediately after operation, if it is necessary to give it at all, I would advise you to give 1-40 grain afterwards every four hours for two or three days. Strychnine is the most direct heart tonic we have. It is a drug that acts on the muscular coats of the blood vessels and intestines.

Another condition that we have to contend with is constipation, and strychnine counteracts this tendency. Keep this up three or four days. If you have used the drainage tube, do not allow it to run over. I told you how it should be adjusted, and the dressings protected by a piece of rubber dam. Everything should be clean. The nurse should be clean in emptying the tube, which should be done with a long nozzle syringe; patient should be on the back. Encourage the patient to remain quiet; because if they begin to toss and roll around, you will find this tendency to move about will increase; but if they will remain quiet on the back for a few hours following the operation, this disposition to roll and toss around will disappear, and they are perfectly content to remain on the back.

After intra-peritoneal operations, patients frequently suffer from thirst, and the first thing they want is to drink cold water, and this is the last thing you can think of giving to your patient. I have kept my patients as long as thirty-six hours without water. There is a reason for this; there is a great disposition to vomit, liquids increase this tendency, and they continue to vomit as long as you give them water. Following this kind of operation you want to starve the tissues for liquids, which causes the fluids in the cavity to be drunk up by the tissues. If the fluids that are within the pelvis are drunk up, you starve the micro-organisms, you take the pabulum from them, and instead of multiplying, they are absorbed and destroyed in the circulation, and the patient recovers; otherwise it acts like the gelatine in the culture tube, and they multiply, and the patient dies from sepsis, or peritonitis.

There is a reason for everything done in abdominal surgery; there are well grounded reasons why these things are done, not only during the operation but afterwards. The first water you will give the patient will be a few teaspoonsful of hot water, as hot as she can stand it; it will quench the thirst better than cold water, and will have a tendency to prevent vomiting from developing, that is if she must have liquid. Now, if you have an unruly patient that is bound to have water, and will fight for it, the best thing to do is to inject four to six ounces into the rectum every three hours; it will quench thirst, and besides it will not derange the stomach if she has a tendency to vomit.

Vomiting is another thing we have to contend with; it is one of the most annoying conditions that we have to deal with. The less you do for the vomiting following an operation, the quicker it will stop. I frequently have to battle

with the consultants in the management of vomiting following operations of this nature; they want to give bismuth, carbolic acid, oxalate of cerium, in fact anything that is recommended to control it. The more you put into the stomach of these patients, you will find the longer the vomiting will persist. The best thing to do is to withhold all fluids from the stomach. Now, if she continues to vomit for eight, ten, fifteen, or twenty-four hours following the operation, you may lookout for something else coming, and it is in the form of sepsis, or peritonitis in most cases. Patients as a rule do not vomit longer than six to eight hours after the operation, where the nausea is due to the anæsthetic alone. If it continues longer, you may know there is something going wrong; especially is this true if the pulse is quickened. If it has continued longer than ten or fifteen hours, I would advise you to give your patient 1-4 grain of calomel and one grain of soda every hour. If there is any one remedy that will control vomiting, it is this size dose of calomel; it will move the bowels. The vomiting is an indication that there is something threatening, and that is sepsis or peritonitis, as manifested by vomiting, constipation, and tympanitis. The next symptom is gaseous distention of the bowels. The treatment for vomiting will be the treatment for distension of the bowels. If there is a disposition to become distended, take a small piece of flannel cloth fifteen by eighteen inches, dip in hot water, pour a teaspoonful of turpentine on to it, lay across the abdomen. It is one of the best anti-septics, eliminated by the bowels and kidneys. It is one of the best agents to prevent flatulence. While this is being done, I would advise you to use an enema composed of one to two quarts of water, two teaspoonfuls of turpentine, two ounces epsom salts, and two ounces glycerine. This injected into the bowel with a fountain syringe and retained for a few moments, will cause the bowels to move in most instances. If they do not move, the patient will pass large quantities of gas from the injection, and will feel much relieved; the bandages are not so tight, it gives good free movement, and the vomiting will cease, or at least be controlled in many cases after the bowel movement. This is the reason that I say that the persistence of vomiting indicates that there is something threatening. The behavior of these cases I am describing, is just the way they come in practice. Supposing you have given an enema, the bowels reject the water, you have been giving 1-4 grain calomel every hour, and the bowels have not moved, what will you do? You might try, (even though she is vomiting) a seidlitz powder in two doses in hot water, twenty or thirty minutes apart. I always give Seidlitz powder after effervescence; do not give when foaming, as it will add to the distension that she is suffering from. If she retains this, you may renew your enemata every two or three hours, and at the end of three hours if you have not moved the bowels, repeat the Seidlitz powder in two doses in hot water. If she will retain it and is not vomiting much, I would give two teaspoonfuls of sulphate of magnesia every two hours. It will make vomiting more likely than seidlitz powder. If you have succeeded in getting the bowels to move within the first forty-eight hours to seventy-two hours, you will find your patient greatly improved, and you will be safe in giving a favorable prognosis of the case, everything else being equal.

These patients have great disposition to restlessness for two or three days after the operation, and an inability to sleep. If you give anything for this, I would advise 15 grains sulphonal; that will induce sleep. Or if you have not that convenient, give a teaspoonful of bromida; and in two hours if the patient is unable to go to sleep, repeat the dose. Have the urine drawn every four to six hours following the operation. Do not keep the hot bottles around the patient too long. If the patient is sweating, and seems to be too warm, and the temperature is 97½ to 98, have nurse rub her off with dry towels under the clothing; this will be a source of comfort to her.

Now, as regards food. There will come a time when you will want the patient to eat something; what will you give? I begin by giving part of a cup of tea and a piece of dry toast, and that not usually until after forty-eight hours. Rarely do I give my patients anything under forty-eight hours, and sometimes seventy-two hours. They can frequently take beef juice, beef extract, rare beef, and spit out the meat. I sometimes give a little cold buttermilk; it is wholesome, and they will relish it; just a few spoonfuls, in the course of twenty or thirty minutes a few spoonfuls more. Now the patient is doing nicely. At the end of ten or twelve days, if you have made a small incision, you may take out the silk worm gut sutures. I use the silk worm gut, going through all the layers of the parietes. I do not disturb the dressings until time to take out the sutures. After removing the sutures, put two or three small adhesive straps across the wound, leaving them there until they come off, even for two or three months. I do not allow the patient to sit up as early as some do; I like them to keep the bed for at least three weeks. I have never had a hernia following my operations, and I attribute it to the manner in which I close the wound, and from the fact that I keep them in bed longer than most operators. This is a typical case.

But supposing she is going from bad to worse, the bowels distended, nausea persists, bowels refuse to act, what will you do? If your salts fail to move the bowels within five days, the temperature going up and pulse increasing, you are going to lose your patient. But if you can succeed in getting the bowels to move, and the gas to pass off, you may feel safe in saying that the patient will get well; of course this is true only in part. Supposing she develops peritonitis; how will you treat the case? A peritonitis following an intra-peritoneal operation is usually fatal, except it is local; if it is general, the patient generally dies. Of course you should persist in your efforts to move the bowels; keep up the strychnine, keep on the turpentine cloths, open angle of the incision, and wash out with hot boric acid solution two or three times a day; by this means some cases can be saved, but it is the exception. Sometimes when the patient is unable to take food by the mouth, it is advisable to nourish by the rectum. I would advise say, four to six ounces of sweet milk, the white of two eggs, peptonized with Fairchild's peptonizing tube, or tablets. By predigesting the food before injecting, it is easily absorbed, and will nourish the patient. I have done this for eight or ten days without anything going into the stomach.

What are you going to do with the temperature running high? Unless

it runs up to 104 or 105, I advise you to do nothing to bring it down. If it does run up high, one of the best remedies is 15 grains salicylate of soda every four or five hours. This is one of the best remedies to reduce temperature in typhoid fever, though there is not much said about it in your text books. For controlling the pulse you will find it a hard matter to find any thing satisfactory, but try digitalin 1-25 grain along with your strychnine. If that fails, give 8 to 10 drops of stropanthus. Sometimes tincture digitalis 10 to 15 min. every four or five hours. You will find that about 95 per cent. of the cases will have menstrual flow, (a metrostaxis) in two or three days following an operation. This is a good indication that your patient is getting along well. While the patient is on her back, and this flow is going on, I advise you to have the nurse give the patient a vaginal douche at least once a day. This blood getting into the vagina and allowed to remain there, decomposes, and is the source of sepsis. Absorption will take place from this source. By washing the vagina out once or twice a day with a 1-4000 or 1-6000 bichloride solution, it will keep the patient clean. You will find the odor very disagreeable if you do not use douches. In drawing the urine the catheter should be clean, should be washed always, or your patient will develop a cystitis. This will persist for weeks after your patient has gone home. So I advise you especially to observe the precaution given, caring for the bladder. You will have an inflammatory condition developed in the saphenous veins in some cases. This is characterized by great swelling and tenderness along the inner side of the leg down to the toes, and also on upward above Poupart's ligament; sometimes comes on in three or four weeks. Why this occurs no one knows; they may occur in absolutely clean cases.

Following an operation, one condition to be dreaded is a post-operative hæmorrhage. You have been through this mass, liberated all the sound organs, broken up the adhesions, and during the operation you have a great deal of hæmorrhage, in the collapsed condition of your patient at end of the operation, you will find she is not bleeding; you will think it safe to place patient in bed. Always use a drainage tube in cases like this. With the action of the strychnine, increased action of the heart, etc., you will find hæmorrhage will start up that had not commenced at the operation; you will find the bright red blood welling up through the drainage tube, soiling the bed. What will you do for this? If there is anything in the world that makes a surgeon shake in his boots, it is a hæmorrhage of this kind. The re-opening of a wound is a grave procedure. Do not take it for granted that you are not going to have hæmorrhage when you have broken up these adhesions. It is not safe to place patient back in bed without observing whether you have broken any blood vessels. It is much easier to prevent than to stop after it has occurred. Now the hæmorrhage has occurred regardless of your precaution; what will you do? If not too severe, keep the drainage tube dry by emptying it often. If the hæmorrhage is persisting, and making a profound influence, quickly cut the stitches in the lower angle of the incision, call your assistants as soon as possible, give the patient an anæsthetic. While you are doing this, boil your instruments if you can; if you have not time to do that,

pour scalding water on them. It is not now a question of sepsis and boiling instruments, but it is a question of saving your patient's life from hæmorrhage, just as though the brachial artery were cut. While the patient is being placed under the influence of the drug, arrange your instruments, put patient in the Trendelenburg position. You can quickly make this position by turning a chair up, flex patient's knees, throwing hips up at this angle— You quickly open the incision and look for the source of the bleeding. It may be that your pedicle has slipped from the ligature's grasp. You may have torn through the broad ligament, and have hæmorrhage from that source. By this position you are able to find the source, and control it. Now when you have controlled the hæmorrhage, sew the wound up quickly as possible, put back drainage tube, and go along as you would in the first place.

There is nothing that I know of that I have such a horror for as a hæmorrhage of this nature. It is like hæmorrhage after childbirth; everything seems all right, mother, father, grandmother, aunts and cousins crying with joy, and congratulating you on being such a good hand at catching babies; the patient may suddenly have a hæmorrhage and bleed to death within fifteen or twenty minutes. And while it is not as quick in cases of this kind, it is quick enough.

You sometimes have, following these cases, intestinal obstruction. There is only one thing to do, and that is to make an operation for the removal of the obstruction.

I have hurried over the ground this morning, and I trust the Seniors will pardon me for repeating some things I may have said to them in other lectures; but I trust they will find when they go out into practice, that I have not repeated too often. And to the Intermediates and Juniors I will say, you may not have an occasion to use this advice for some time, still you may run on to something of this kind the first thing, in the form of an emergency case; some of these conditions may come up where you will have to carry these suggestions out. Of course I do not think that this work is a trifling affair by any means; I did not have any desire to trifle with it in the beginning of this lecture, nor with your ability. I advise you not to do any abdominal surgery without you are forced into it, until you feel that you are thoroughly prepared to cope with the most dangerous class of surgery.

STRANGULATED HERNIA.

BY J. T. WILSON, M. D., SHERMAN, TEXAS.

There is no disease that comes under the care of the surgeon of more importance than strangulated hernia and none that requires more prompt attention. It is an accident that is always dangerous to life, demanding immediate action and in which delay is often fatal.

With the inestimable advantages in surgical methods that we have over the old surgeons of a century ago, if we are to judge by statistics—and there is no better criterion to govern us—the mortality from operations for strangulated hernia has not been greatly lessened.

I do not think in a paper of this kind it would be profitable to enter into a discussion of the details of pathology, and symptoms, nor of the anatomy, as they are generally well known.

It is nearly always accompanied by more or less severe pain and a distress that is peculiar to it; frequently grave constitutional symptoms rapidly supervene. Occasionally the first outbreak of pain subsides and the symptoms are held for a time in abeyance and lull us into a false security, when inflammatory trouble is progressing. Gangrene may take place before the patient or his surgeon becomes alarmed, the vitality of the constricted parts may in some cases be destroyed in a few hours. These obscure symptoms should be watched with the greatest assiduity and we should not be caught napping on guard while the enemy is taking advantage of our inactivity.

We would be performing a dangerous experiment by administering morphia, relieving the pain, masking the symptoms and delaying action when its demands are to the contrary.

We should never leave a patient with a strangulated hernia unrelieved.

A small hernia is more liable to strangulation than a large one and is more to be dreaded, is more apt to mislead, though its symptoms are generally more urgent.

The question of promptly relieving the strangulation is a supreme one to be maturely considered, the longer it remains unrelieved the more difficult will be the reduction and the greater will be the damage to the vitality of the parts by cutting off the circulation; the progress of inflammatory action increasing the danger.

In the management of the case it is all important to be familiar with the pathology and anatomical relations of the hernial investment; we should know what structures are involved, what forms the constriction and what constitutes the sac, its contents and coverings.

It is needless to say that when the surgeon is summoned to a case of strangulated hernia its reduction demands his immediate attention and will brook no delay, he must be prepared for any emergency. but no attempt should be made at reduction by taxis until all preparations have been completed to meet any indication that may arise, viz: a herniotomy or laparotomy if necessary. The less the hernia is handled the better, for all manipulation increases the inflammatory action and complicates the conditions surrounding it, an exudate is thrown out and adhesions rapidly form. In a majority of cases the strangulation is capable of being relieved by taxis, which should always be instituted, and if successful will be a great gain, and the patient is fortunate indeed when this can be accomplished, but the effort should always be made while the patient is under the influence of an anæsthetic if there be no contra indications for its use, and it should be understood, and the surgeon should be prepared to perform herniotomy if the taxis is not effective. This procedure should not be persisted in too long because there is danger of rupturing the intestines by rude manipulation if softening has more or less progressed, but he should with gentleness and care make sufficient effort to satisfy himself, when the system has been relaxed by the anæsthetic, rendering the patient

incapable of resistance and free from pain, that he cannot succeed, when herniotomy should be resorted to before the patient comes from under the anæsthetic influence.

If gangrene is suspected the effort of reduction by taxis is not justifiable, but the sac should be laid open and its contents dealt with according to the indications from the conditions found.

There are cases where the strangulation is not relieved when the hernia has been reduced, in these cases the constriction is caused by bands within the sac, and if the sac and its contents have been reduced *en masse* in this condition grave results may be anticipated, and a median laparotomy will be indicated.

In operating for strangulated hernia it should not be forgotten that the coverings are sometimes extremely thin and the greatest caution should be exercised to prevent wounding of the gut.

Much embarrassment is sometimes caused in not being able to recognize the sac. It is an oblong or round body, having a bluish color and with some fine straggling vessels scattered over its surface, is usually a thin membrane, though it is sometimes much thickened from inflammatory exudate. Agnew insists that the test can be made "by grasping it between the thumb and fingers and if its opposite surfaces can be rubbed or slid upon each other its identity will be established, or if there still remains some obscurity or uncertainty let a puncture with a fine needle be made into the part, when if it be the sac, the escape of a few drops of serum will declare its true nature."

Death from strangulated hernia may be caused by shock, peritonitis, hæmorrhage, pyæmia or other septic troubles or complications.

When the bowel is in a gangrenous condition it is septic, and returning it to the abdominal cavity in this condition is very liable to cause septic peritonitis.

There are some cases in which the bowel may appear dark, even black and lifeless, yet when the constriction is removed it will soon revive and regain its natural condition. When the sac is opened and this state of affairs is found it is best not to return the bowel until the circulation is re-established and its septic condition removed; it should be kept outside and after having been relieved of its constriction well covered and wrapped in warm sterilized flannel cloths or warm iodoform gauze and well covered with aseptic absorbent cotton, if softening not too far advanced; this being the case primary resection is demanded if it is thought the patient can recover from the shock, if the condition is such that risk to life from this somewhat tedious operation is too great then the gut should be drawn out until its more healthy parts come into view, stitched to the side of the wound and an artificial anus created until patient has so improved that the operation can be proceeded with.

When the patient will bear it I believe primary resection in true gangrene is best, with every preparation before hand, the patient bolstered up to withstand the anæsthetic shock, with ordinary skill and rapidity the resection can be made and the risks from secondary operation avoided. It is due to state, however, that the management of the gangrenous gut has not yet been definitely settled, except so far as not to return it in that condition into the abdominal cavity.

Excision of the gut in a gangrenous condition, which also implies in most cases a bad state of the patient's general health should be most carefully done on account of the great mortality hitherto attending it. It should not be performed by an unskillful operator. There is scarcely any operation in surgery that so often depends for success upon rapidity and skill in execution. The operator should know what he is doing and when it has to be done, should be thoroughly prepared to do it properly, should not attempt it if there is doubt owing to the very unfavorable condition of the patient. The strictest antiseptic principles should be carried out, but great care should be had in the application to the gut of strong antiseptic drugs, for fear of irreparable damage which they are likely to inflict.

Of course every case must be decided upon its own merits. Richardson thinks the danger to life in resection in suitable cases is probably not greater than artificial anus with the dangers attending the subsequent closure of the same. In many of these cases it may be best to perform a laparotomy in the median line, resect the gut and perform an intestinal anastomosis with the Murphy button, or the Senn's plates. In some conditions of the structures involved, the extent of the gangrene and inflammatory surroundings, this operation may promise the best results.

There are some very important points to remember, viz: A patient with strangulated hernia should never be left unrelieved. That taxis is frequently successful if applied under an anæsthetic and should not generally be attempted without. The surgeon should be prepared to perform herniotomy if taxis fail while the patient is still under the influence of an anæsthetic.

Serious trouble is likely to arise in a few hours after strangulation takes place. When taxis is applied if seemingly successful the surgeon should satisfy himself that reduction is complete. Taxis should not be practiced if the bowel has been constricted for some time and softening has taken place. The bowel should never be returned into the abdominal cavity in a septic condition. In most cases of strangulated hernia when gangrene has supervened, it is safest to relieve the constriction and form an artificial anus at the first operation and give the patient time to rally before the secondary operation is performed. If the patient is in fairly good condition, primary resection may be made with fair hope of success, but it should be remembered that rapidity and skill are essential to good results in this as well as the other operations for strangulated hernia.

EDITORIAL.

DR. LANPHEAR AND THE COLLEGE OF PHYSICIANS AND SURGEONS.

Dr. Lanphear, former editor of the INDEX, who left Kansas City upon the invitation of the St. Louis College of Physicians and Surgeons has resigned his chair of Professor of Surgery, his position as Secretary of the School and his position as editor of the college paper, the *St. Louis Clinique*, and is

to be found at 2315 Saulisbury St., St. Louis, attending to his practice of medicine and surgery.

The step was taken owing to a difference of opinion as to the conduct of the *Clinique* and is certainly an unfortunate one. Those most closely acquainted with Dr. Lanphear know the bright prospects that were before him here when he accepted the offer that took him away and realize what the change cost him. He threw his whole soul into the upbuilding of the school. He drew to it a large class, and advertised it far and wide, and filled its faculty with bright men, each honored in his branch of medical science. His touch seemed magical and under his guiding hand prosperity came to the college. The effect of his withdrawal cannot but be bad. His method of obtaining students are his own. They have been criticised and defended, yet such as they were they succeed and with the sanction of the Board of Trustees, and we believe that the action of the Board in so hampering him that he felt impelled to withdraw, is one that the profession and students of the country will not look upon with favor. The break is an unfortunate one and we believe a most serious and mistaken one for our Alma Mater.

DEATH OF PROFESSOR LOOMIS.

Professor Alfred L. Loomis, teacher, author, writer and great physician, Professor of Pathology and Practice of Medicine, College of Physicians and Surgeons, New York, died January 23rd, of pneumonia, a disease in which he was a skilled expert. His estate is worth over a million dollars, and one hundred thousand dollars are left to the New York Academy in trust, the interest to be used annually in the giving of a banquet. Thus will his memory be honored, for medical men at a banquet are the personification of dignified enjoyment and the memory of Professor Loomis will be fittingly refreshed among the pleasant scenes he loved to frequent, another gift coming through him was \$100,000.00 to found and equip a laboratory for the University of New York; and thus grandly closes a great life.

SALT LAKE CITY, UTAH, February 9th, 1895.

Dear Doctor:—A meeting of the regular medical profession of the Territory will be held at the Knutsford Hotel, Salt Lake City, Tuesday evening, February 26th, 1895, at eight o'clock, for the purpose of organizing a State Medical Society and arranging for the first annual meeting of the same.

You are earnestly requested to be present as it is important that we have as large a representation of the profession as possible.

Signed,

A. C. MACLEAN, M. D.,
PHILO E. JONES, M. D.,
R. W. FISHER, M. D.,

Com. Salt Lake Medical Society.

G. W. PERKINS, M. D.,
J. M. ARMSTRONG, M. D.,
J. S. GORDON, M. D.,

Com. Ogden Medical Society.

The above named communication was sent to nearly two hundred Doctors in Utah, and out of that number a State Medical Society was organized Tuesday evening, February 26th, 1895, with forty-seven members.

It is gratifying indeed, to note that Utah comes to the front with its State

Medical Organization. Further particulars will be given when the first annual meeting is held.

The INDEX extends its congratulations to the new society, and wishes it health and long life.

THE TRI-STATE MEETING.

The next meeting of the Tri-State Medical Society, of Iowa, Illinois and Missouri, will be held at St. Louis, April 2nd, 3rd and 4th, 1895. The following is a list of officers: President, Dr. James Moores Ball, St. Louis; Senior Vice-President, Dr. Bayard Holmes, Chicago; Junior Vice-President, Dr. L. A. Malone, Jacksonville, Ill.; Treasurer, Dr. Charles S. Chase, Waterloo, Ia.; Secretary, Dr. Frank P. Norbury, Jacksonville, Ill. Committee on arrangements: Drs. W. B. Outen, J. H. McEntyre, Geo. W. Cale, H. W. Loeb, A. J. Steele, E. H. Gregory, C. H. Hughes and James A. Close.

All of our readers that can possibly do so will find a most enjoyable time awaiting them if they attend this meeting.

THROWING THE CLOAK OF "ART" OVER INDECENCY.

Dr. J. N. Love, of St. Louis, editor of the *Medical Mirror*, has expressed his opinion as only Dr. Love can, with the gentle directness that reaches the case with no uncertainty and no bluster. Speaking of pictures of nude women displayed in advertising pages of medical journals he says:

"The medical journal which is supposed to be established for the advancement of science and the upbuilding of the profession, is certainly not disposed to draw any lines of sentimentality when it becomes necessary to illustrate an article, no matter what may be shown up as regards the human form, male or female, but when a medical journal presents within its covers, sandwiched in between advertisements, reproductions of the nude in art, can we endorse it from the stand point of science or art? Most assuredly we can not. The engraver's art is enriching the field of publication more and more each day. That this art is being called into play in the presenting of pathological specimens and the counterfeit presentment of men worthy of honor in the profession, is appropriate, but when pictures of the nude female are placed in a medical journal, they are dislocated. They are in offense against all decency and should be so considered by subscribers, respectable members of the medical profession.

The advertiser who has any conception of the fitness of things, can not be other than disgusted at such efforts to draw attention to the advertising columns on the part of a medical journal.

It will be admitted that the *Medical Mirror* has not been disposed to pass criticism upon its contemporaries; indeed it has always felt that unless it could commend, it would remain silent; that each and every journal was making its best effort in the direction of the good of the profession, and though the work was not always satisfactory from the stand point of the *Medical Mirror*, yet condemnation has not indulged; but the line has been reached when such vulgar, prurient efforts are made in the direction of the debasement of legitimate medical journalism. We trust that every decent medical journal will condemn such efforts.

There is a time for all things and a place for all things. We indulge in no sentimentality. We admire art in all of its details. We even admire the nude in art, but we enter a protest when we observe the nude in art used for

improper purposes. A nude woman, real or in the picture, is an outrage against all decency when used for commercial purposes, and the placing of these pictures anywhere in a medical journal, most of all, if sandwiched in between advertising pages, is an insult to woman, the reader of the journal, and to the advertiser."

"WHOM THE GOD'S WOULD DESTROY," ETC.

In November, 1893, one of our contributors, Dr. Rucker, of Eufaula, Ind. Ter., contributed an article to the INDEX, illustrated by a cut of a patient having glioma of the eye-ball. The patient died soon after the removal of the tumor.

The identical same picture appeared in one of our exchanges as an illustration of an article by the editor accompanied by the statement that "he now reported one of his four cases and accompanied the report *with photographs of the patient.*" His patient is reported as having recovered; and the other having died (as before stated) called forth a serio-comic communication from a gentleman in another city. This our brother editor took literally, and sadly to heart. In a red inked, red eyed, red headed editorial he assails the writer of the communication, the INDEX, and the editor thereof, and blazes forth such stunning phrases as "libeler," "culumniator," "scandal monger," "assassin of human character," who has "malicious hearts and sordid impulses," and talks wildly about damages, and "severe penalties to which their intemperate pens lay them legally liable." Really this is too bad! If we have assassinated anybody's "human character," the coroner should hold an inquest, but it really looks as if the gentleman caught "cribbing" was attempting to stir up a large cloud of red smoke and escape the implied charge unobserved. It only remains to add that those of our subscribers who have not paid their subscriptions for 1895 should do so at once, that we may prepare for the "severe legal penalties" awaiting us. And now we dismiss the matter once for all, believing that Kansas City dirty linen should be washed at home and not aired to the world on pages that should be devoted to supplying the subscriber's needs.

EDITORIAL NOTES.

LAXATIVES FOR CHILDREN.—One frequently has occasion to prescribe for young children a laxative that will be prompt and easy to administer. In the *Columbus Medical Journal*, Dr. H. C. Smith gives the following formula, which he says he has used with perfect satisfaction.

R	Glycerine,.....	ʒj
	Oil of Cinnamon	mv
	Triturate well and add,	
	Castor oil.....	ʒj

Mix and give a teaspoonful at a dose, repeated as necessary. This is preferable to any of the nostrums so frequently sold for this purpose.

COLIC IN NURSING INFANTS.—Perhaps one of the most annoying ailments that the practitioner has to meet is persistent colic in infants. It is that trouble which most frequently disturbs his rest at night and worries and weakens the strength of the

mother. The *North American Practitioner*, for July, gives the following excellent treatment, copied from a foreign exchange, which we reproduce.

For three doses during the day, one-tenth of a grain of calomel is administered. This small dose should be thoroughly triturated with sugar of milk, either by the druggist or physician, or it may be employed in the ready manufactured triturate tablets of Parke, Davis & Co., Wyeth and others. At the same time the following mixture should be given.

R	Fennel water	}ss ʒi
	Distilled water	}ss ʒi
	Cherry-laural water,...	mxv
	Tincture of opium,.....	mi
	Simply syrup,.....		q. s. ad. ʒiv

Mix.—Give of this mixture one teaspoonful every two hours until pain is relieved, and from one-half to one teaspoonful after nursing for several days after the relief of the attack. In the meantime, the diet of the mother and the dressing of the child should receive proper attention.

ENLARGED PROSTATE.—Physicians often come in contact with old men who suffer from enlarged prostate. There is difficulty in urinating, and the patient has been in the habit of drawing his own urine with a catheter. His attempts have been futile, and he has lacerated the urethra to bleeding. Now he is in great distress. The urethral tenesmus is terrible. An olive-shaped woven catheter in the hands of a good manipulator soon relieves the distended bladder, but the tenesmus continues, and the patient insists on the introduction of the catheter every half, one or two hours. Now, it is a well known fact that urine cannot collect in so short a time in volume sufficient to distend the bladder to produce this desire for urination. What then is to be done? Let the bladder alone for six hours. Order that no catheter be introduced for this length of time at least. Seek to allay the urethral tenesmus in another way. Now is the time to use rectal suppositories:

No. 1.	R	Opii Pulvis.....	gr. ʒj
		Camphor Pulvis.....	gr. xij
		Extract Belladonna.....	gr. iv
		Coca Butter.....	q. s.
		Fiat suppositories, No. 6.	

One of these to be introduced into the rectum and have the patient take the recumbent position. One of these will usually allay all anxiety. One night and morning is generally sufficient to keep down the tenesmus. Draw the urine off every six or eight hours carefully. After the above effects have subsided, good results follow the nightly use of the following rectal suppositories:

No. 2.	R	Carbo-ligni.....	ʒij
		Gallic Acid.....	ʒj
		Extract Hamamelis.....	ʒj
		Mix.	

The patient is given the hollow rectal suppositories No. 2. and shown how to fill them. One to be inserted every evening, or perhaps morning and evening. Five grains of salol is to be taken three times a day. In a few days the patient will be able, in most cases, to void his urine without the use of the instrument, and by care and avoidance of catching cold will be rendered easy and happy.—*Toledo Medical Compend.*

[For the surgical treatment of this trouble our readers are referred to the January number of the *INDEX*, page 11.—ED.]

CASCARA SAGRADA FOR THE ELIMINATION OF URIC ACID.—"It seems to be the accepted opinion that the pathology of uric acid is more a matter of defective elimination than of excessive formation. Osler says: "Certain symptoms arise in connection with defective food or tissue metabolism, more particularly of the nitrogenous elements; and this faulty metabolism, if long continued, may lead to gout, with uratic deposits in the joints, acute inflammations, and arterial and renal disease."

Not getting the desired results, I was led to drop all the so-called antilithics, and rely simply and solely upon a single remedy—*Cascara Sagrada*. Repeated trials have convinced me that the faulty metabolism is more quickly remedied with this drug alone than with any other or combinations.

Mrs. G., aged fifty-five was for years subject to uric acid storms, and without getting relief. I exhibited the aromatic fluid extract *cascara* made by Parke, Davis & Co., in ten to fifteen-drop doses, two or three times daily, as demanded, finally settling down to one single dose at the close of the day. The effect was not at once apparent, but in two weeks there was marked amelioration of the aggravated symptoms, and in four weeks the swollen joints had almost resumed a normal appearance, the soreness having nearly disappeared. At this writing (two months having elapsed), there is no complaint whatever, but the remedy is continued. No change was made in the diet, as I desired to more fully test the remedy, and am fully satisfied that the good results were due solely to the *cascara*. I have tried other brands of *cascara*, but they have not been satisfactory, hence I have come to regard the fluid extract above alluded to as the only one upon which I can confidently rely. It never fails, hence my preference.—Dr. W. H. Walling, in the *Medical and Surgical Reporter*, July 14th, 1894.”

A combination with salicylate of sodium is an excellent mixture, but the salicylate must be *pure* from oil of winter green.

A TREATMENT FOR ACNE OF THE FACE.—This annoying trouble will often baffle the skill of the doctor for months, sometimes disfiguring an otherwise handsome face for years. The *New York Medical Journal* quotes the following as good in its treatment. It is quoted from the *Lyon Medical* as the treatment employed at the Hospital St. Louis with great success:

“Fresh lard.....	750 grains
Sublimed sulphur.....	106 grains
Beta-naphthol,	} ss..... 30 grains
Styrax ointment,	

Applications of this mixture should be made with strong friction every night for a week, then interrupted for six days, when they may be repeated if necessary, although it is often useless to do so. If there is an appearance of small acute clusters, which generally show themselves toward the second day, the acne is ordinarily cured or very much ameliorated at the end of a week.”

A SIMPLE TREATMENT FOR CANCER.—The patient, when a cancer is suspected, should be examined by one qualified to give an opinion as to the positive identity of the suspicious growth. If in a location to be reached it should be removed early and cleanly and no amount of tinkering allowed before the removal is done. This is the opinion of the surgeons of to-day. In cases that cannot be brought to operation the following will be of benefit perhaps. We have had no experience with it and only give it on its own merits and on account of the good name of its recommendors. The *Cincinnati Lancet Clinic* quotes from the *Pacific Record* as follows: “J. Carne Ross, M. D., physician to the Ancoats Hospital, Manchester, communicates a letter to the *Lancet*, of July 21, 1894, in which he gives the results of some experiments he has undertaken on the above subject. Dr. Ross states that while carefully guarding himself from saying anything that would suggest that cinnamon should be regarded as a so-called specific in cancer, yet he has invariably found that where pain was present it ceased, that fetor disappeared, that the general health invariably improved after using the drug. The best results have, on the whole, been obtained where the tumor was cut off from the air by being situated either in the stomach, the rectum, the uterus or the mamma where the superjacent skin and covering of the nipple were intact. Dr. Ross then gives particulars of five cases which were under the cinnamon treatment, in each of which marked improvement ensued. The preparation of cinnamon employed was a strong decoction made by taking one pound of Ceylon sticks and boil

ing slowly, in a closed vessel for eight hours in three pints of water till the water is reduced to one pint, pouring off without straining. The mixture should be shaken up before taking each dose; patient to drink half a pint every twenty-four hours, the half pint to be divided into such doses as best suit the patient."

BONE MARROW IN ANEMIA.—Bone marrow is a material that is always at our command; and in cases of severe pernicious anemia, continued feeding of the material to the patient, has been attended with surprisingly good results. Just why this is we do not know. We know, however, that the red corpuscles have their origin in the red marrow of bones, and there may be some connection between this fact and the wonderful results obtained by the application of this substance to the treatment of anemia. The *Medical Summary* says:

"Dr. Frazier, of Edinburg, read a paper before the International Medical Congress, at Rome, last year, on the effects of bone marrow in pernicious anemia, which attracted considerable attention. In this paper was presented the history of a case which at the beginning of the disease the hæmatocytes numbered 1,000,000 per cubic millimetre, and the hæmoglobin twenty-five per cent. After a month's treatment, first with iron, then with arsenic, afterward with salol, no appreciable improvement was manifested. At the end of that time bone marrow was administered with remarkable results. The patient gradually improved and in two months the blood had a composition of 4,000,000 hæmatocytes and the hæmoglobin has risen to eighty per cent. Dr. I. N. Danforth, whose wife was suffering from pernicious anemia, had his attention attracted to the new method after accidentally coming across the paragraph in a London journal, one morning in the latter part of April last. It stated that Dr. Danforth immediately procured some bone marrow and began feeding it to his patient, whose condition, despite every thing that had been tried, was desperate. She at once began to improve and in four or five months was comparatively well.

Dr. W. G. Biggs, reports a case of leucocythemia in a boy of twelve years; in a London journal, where the patient was given four slices of bread, daily, on each of which the raw bone marrow was thickly spread. The improvement of the boy's condition after the first week, was "little short of marvelous." The anemia and jaundice disappeared, and the skin and mucous membrane acquired a healthy color. The symptoms due to the anemia at the same time passed off, and in three weeks the boy was able to walk about without shortness of breath or palpitation. The temperature also became normal, and has remained so. It is stated that the boy evidently became entirely well. Both the cases reported are intractable diseases; the former, heretofore, fatal. If we have a remedy in bone marrow for such obstinate and dangerous diseases, as above illustrated, then therapeutics has made another remarkable stride.

CHRONIC CONSTIPATION.—There are few writers who have attracted more attention in their own peculiar field, than has Dr. I. J. M. Gross, of Marietta, Georgia.

The Doctor does not write on subjects of pathology, or practical scientific theory, but generally confines his writings to the direct study of the application of drugs and medicine to the cure of disease.

In the *Journal of Materia Medica* for February, he gives the following brief direction for the cure of chronic constipation.

If the cause of constipation be atony of the lower bowels, an enema of glycerine will overcome the atony. Use it in water, say one ounce to four of water, used in the morning.

If the liver and upper bowels are torpid, the phosphate of soda, in doses of one-half to one ounce, early in the morning for one or two mornings, then in doses of five or six grains, often regulates the liver and the bowels. It should be used so as to merely get up, if possible, natural action of the bowels. The phosphate of soda may be taken at meal time, and even with soup, as its taste is much like common salt. The digestion should be looked after.

If the constipation is the result of feeble digestion, *nux vomica* should be given in doses of five drops of the tincture before meals.

I have found relief from the daily use of phosphate of soda. It acts on all the secretions, as may be seen by the improved digestions, deeper color of the feces, and the softening of the stools.

THE PNEUMOGASTRIC NERVE

LITTLE ITEMS.

A number of medical colleges intend teaching only the metric system next year.

Dr. Hal Foster, 1116 Main Street, has been appointed consulting Laryngologist to St. Margaret's Hospital.

The Kansas State Medical Society meets at Topeka, May 1895. Secretary is Dr. Perdue, Wichita, Kansas.

is something wrong inside, to wit—
My pneumogastric nerve.

Now when these Latin names within
Dyspeptic hulks like mine
Go wrong, a fellow should begin
To draw what's called the line,
It seems, however, that this same
Which in my hulk abounds
Is not, despite its awful name,
So fatal as it sounds;
Yet of all torments known to me
I'll say without reserve
There is no torment like to thee,
Thou pneumogastric nerve!

This subtle, envious nerve appears
To be a patient foe—
It waited nearly forty years
Its chance to lay me low;
Then, like some blithering blast of hell,
It struck this guileless bard
And in that evil hour I fell
Prodigious far and hard.
Alas! what things I dearly love—
Pies, puddings and preserves—
Are sure to rouse the vengeance of
All pneumogastric nerves.

Oh, that I could remodel man!
I'd end these cruel pains
By hitting on a different plan
From that which now obtains,
The stomach greatly amplified,
Anon should occupy
The all of that domain inside
Where heart and lungs now lie;
But first of all I should depose
That diabolic curve
And author of my thousand woes,
The pneumogastric nerve.

—Eugene Field.

THE KANSAS STATE BOARD OF HEALTH.—The State Board of Health, of Kansas, met March 7th, and organized by electing Dr. Taylor E. Raines, of Concordia, president; and Dr. T. Kirkpatrick, of Westphalia, secretary. Dr. Raines is a homeopathist, and Dr. Kirkpatrick is an allopath. Dr. J. L. Gilbert, of Topeka, was chosen State chemist.

The executive com
T. E. Raines, of Co
and Dr. P. D. St. J
the Public Health
present at the meet
olis; A. Gifford, La
B. S. Wilson, Olat

mith; of Washington;
Clifford of Lawrence,
the annual meeting of
members of the Board
John Miller, Minneap-
St. John, Wichita; S.

do not know. We ki
marrow of bones, and
ful results obtained by the application of this substance to the treatment of anemia.
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A pleasant formula for the relief of asthmatic spasms, which does not contain any disadvantages of a narcotic, is the following:

℞	Pure chloroform.....	℥j
	Ether.....	℥ss
	Syrup of Acacia.....	℥x
	Tinc. of Cardamon, Comp.,.....	℥j

Mix and take a teaspoonful every half hour until relief is obtained.

BOOK TALK.

Books reviewed in these columns may be obtained of Dr. A. M. Wilson, room 27, Union Depot, Kansas City, Mo. Discounts where possible.

The following new books appear upon our table for review in a coming number: The new edition of "Flint's Practice of Medicine." "Manual of Bandaging," by Leonard. Rohe: Text Book of Hygiene, third edition. Purdy: Practical Urinalysis, etc. Grandin and Jarman-Obstetric Surgery. The New Standard Dictionary, by Funk & Wagnalls. Wm. Warner's Reference Book of Therapeutics. Diseases of the Eye and Ear; by Deuch. Aseptic Surgical Technique, by Robb. Helbing's Modern Materia Medica. Antisepsis and Antiseptics; by Buchanan. Surgery 200 Years Ago. Twentieth Century Practice; Wm. Wood & Co.

LITERARY NOTES.

Lea Brothers, of Philadelphia, bring in a new system of surgery by American authors. The authors comprise thirty-five to forty of the best surgeons and physicians of this country.

It is edited by Dr. Dennis, the professor of the principles and practice of surgery in Bellevue Hospital, Medical College, New York.

The book is creating quite a sensation, and from inspection of advance sheets promises to be quite a remarkably fine book. It is being subscribed for in advance of its publication.

We shall be pleased to present its review to our readers in the April or May number.

Another new book, which will be presented for review in a later issue, is creating marked stir among our doctors.

It is entitled, Medical Gynæcology, and treats of this important specialty, from the physician's stand point, and not from the stand point of a surgeon.

It is written by that gifted and fluent writer, Dr. Alexander Skeen, whose long career as a teacher and professor of Gynæcology, in New York, has give him a world wide prestige.

This book will prove very acceptable to those, who from choice or other wise, find it desireable to treat cases of Gynæcology by medical methods and not by surgical ones.

LITTLE ITEMS.

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The Kansas State Medical Society meets at Topeka, May 1895. Secretary is Dr. Perdue, Wichita, Kansas.

Prof. W. B. Rodgers, was recently elected dean of the Hospital Medical College, of Memphis, vice Dr. L. S. Sim, deceased.

Dr. Ramon Guiteras, has recently been made Professor of Operative Surgery in the Post-Graduate Medical School of New York.

Drs. E. L. Chambliss and Gordan A. Beedle, have moved their offices from the Ridge building to the Rialto building, 9th and Grand Ave.

Fifty physicians of Detroit, Mich., have adopted resolutions denouncing the Health officer for representing cases of small pox to be chicken pox.

Dr. Geo. M. Sternberg, Surgeon General of the United States Army, has recently been honored with the degree of LL. D., by the University of Michigan.

Dr. Robert Funkhouser, has been appointed to fill the Chair of Surgery, in the St. Louis College of Physicians and Surgeons, vice Dr. Emory Lanphear resigned.

The Missouri State Medical Society meets at Hannibal, Missouri. May 21st, 1895; more about rates and railroads in our April issue. Secretary is Dr. L. A. Berger, Kansas City, Missouri.

The Physicians Supply Company, of this city, are now carrying a full line of Parke, Davis & Co's., tablet triturates and compressed tablets, at reasonable prices. Physicians using these goods will bear this in mind.

By the will of the late Dr. William Goodell, of Philadelphia, the sum of \$50,000 is donated to the Medical Department of the University of Pennsylvania. The College of Physicians will from the same source fall heir to \$10,000.

Dr. H. C. Crowell, the present President of the Jackson County Medical Society, has been appointed consulting Gynæcologist to St. Margaret's Hospital. Dr. Crowell is well known, through his writings, to the readers of the INDEX.

FOR SALE.—A full set of charts of skin diseases. The set edited by Prince A. Marrow, M. D., and published by William Wood & Co. This is one of the finest atlases published and costs, complete, thirty dollars (\$30.00.) Price, \$15.00.

Dr. W. W. Keen and Dr. Charles A. Oliver are to hold surgical clinics in St. Louis for the benefit of the Doctors attending the Tri-State Medical Society. The national reputation of these gentlemen will insure them an interesting audience.

Dr. W. C. Tyree, so far departed from his habit as a carfeul oculist, as to attend the recent meeting of the Forest Shooting Club, of which he is an enthusiastic member. He succeeded in winning the first prize, a gold medal, with diamond setting, the annual trophy for 1895, offered by the Club.

Dr. Mamie S. Hoagland, graduate of the Medical Department of the Ann Arbor University, has been installed house physician at Bonner Springs Sanitarium. We think this an exceedingly wise move, as insane women above all others should be allowed a physician of their own sex.

The Committee of Arrangements is making elaborate preparations for a grand banquet to be given at the Planters' Hotel, the evening of April 3rd. Many distinguished after-dinner speakers will be present to entertain the intellect; there can be no doubt that the wants of the inner man will be satisfied.

The Committee of Arrangements of the Tri State Medical Society announces that railways will give reduced rates to the meeting of the society which occurs at St. Louis, April 2nd, 3rd, and 4th, 1895. Gentlemen purchasing tickets for St. Louis are requested to ask the local agent for certificate which will be signed by the secretary of the society.

Dr. A. M. Wilson, of room 27, Union Depot, has taken advertising space in the INDEX, and is handling a full line of medical books, and in addition, is carrying a full line of alkaloids, granules, tablets, medicine cases, etc. As these goods are becoming so universally used, we would recommend our readers to write him when desiring to investigate this method of medication.

Dr. Emory Lanphear, has resigned the Chair of Surgery in the College of Physicians and Surgeons, of St. Louis, Mo., also as editor of the *Clinique*, the official organ of the school. He will be remembered by the readers of the Journal, as its former editor. The difficulties which arose between Dr. Lanphear and the faculty were, we understand regarding the mode of running the *Clinique*.

A. S. Aloe & Co., 415 N. Broadway, St. Louis, Mo., having spent \$15,000.00 on a new catalogue of surgical instruments will send it free if the MEDICAL INDEX is mentioned to any doctor who will pay express charges on the package. Its size may be imagined when we tell you that it weighs four pounds! has over 3,000 illustrations and 1,070 pages. Don't forget in ordering to mention the MEDICAL INDEX.

Dr. John W. Kyger will leave Kansas City about April 1st, for the purpose of taking a special course in Diseases of Children at the New York Polyclinic and Hospital under the eminent Dr. L. Emmet Holt. It is certainly an encouraging sign when medical men thus pay such special attention to medical subjects and cease running riot after surgery. Dr. Kyger has been a frequent contributor to the pages of the INDEX in past years and is the author of a work on Infant Foods and Infant Feeding.

Mr. F. K. Stearns, president of the celebrated pharmaceutical house of Frederick Stearns & Co., of Detroit, Mich., has recently established a \$600 fellowship in the Michigan University, to be known as "The Stearns' Fellowship of Pharmaceutical Chemistry and Pharmacology." The University may well be proud of such a magnificent gift, and we would be pleased to see the example set by this generous man, followed by some of our energetic men in the west.

W. A. McDowell, representing Wm. Wood & Co., with their new books, *Matthieu on Stomach Diseases*, *Finger on Blenorrhea of the Sexual Organs*, and *Dana on Nervous Diseases*, is calling upon the doctors of the city. The prince of weekly papers, *The New York Medical Record* is in his hands. No other weekly paper in the world can show the variety of medical news and scientific articles that the *Record* does, and every physician is made better and wiser for its company. He also handles *American Journal of Obstetrics and Diseases of Women and Children*.

Dr. Willis P. King, the author of "The Row in Galveston," is reported to have sufficiently improved in health to again be on the streets of Kansas City. Since his trip to Galveston last May, it is said, he has been a mental and physical wreck. We hope his contemplated trip to the South this winter will again restore both.—*Columbus Medical Journal*, February. We are pleased to assure our friends of the *Columbus Medical Journal*, that Dr. King has returned strong and well from his southern outing and is again in charge of his large private practice and the Missouri Pacific Hospital at this point, with its many cares and duties.

The elegant Planter's Hotel has been chosen as the headquarters of the coming meeting of the Tri-State Medical Society. The sessions will be held in the ladies' ordinary, which is large enough to seat several hundred. Committee rooms are adjoining. The management of this celebrated hotel will make unusual efforts to please the visiting doctors. Rates on American plan: When two persons occupy the same room, \$3.00 per day each. On single rooms a reduction of 50 cents per day will be made on all rooms from \$4.00 per day and upwards. This will enable them to give a room with bath for \$4.00 per day. When two persons occupy a room with bath the rate will be \$3.50 per day and upwards. European plan \$1.50 per day and upwards.

The Maltine Manufacturing Co., have gotten up a very neat little bedside-record, bound in paper covers and containing blanks for recording the pulse-rate, temperature and respiration of the patient for twenty-eight days and furnishing a margin for notes and instructions to nurses. They send them for 35 cents per dozen copies. One copy will furnish a complete history of a case in a form that admits of its preservation. There are added two or three pages of rules to be followed in cooking for the sick; they are good to keep and use and are cheap as well.

The Spitz dog of a highly respectable family of this city had a difficulty with his throat. Respiration impeded; deglutition difficult. The carriage was ordered out and Tip was taken to a leading surgeon. The latter diagnosed stenosis or tumor of the larynx in the neighborhood of the vocal cords, as Tip's bark had sailed away and was lost at C. An examination confirmed this diagnosis, and under chloroform an operation was performed. The dog died. At post-mortem examination it was found that some one had slipped over his head a rubber band, such as druggists use to tie up packages. It had worked through the hair and bedded itself in the skin. In any case it was the cause of the dog's death, and the bereaved are now querying where to fix the blame.—*Cincinnati Lancet Clinic*.

Dr. Brummell Jones, of Kansas City, was before the house committee on benevolent and scientific institutions February 12, in support of Mr. Bothwell's bill establishing a home for imbecile children. He thinks \$50,000 and 160 acres of land would be sufficient to put the home on a fair footing. He says that idioey, insanity and other forms of nerve troubles are in-bred, and that the number of imbeciles in Missouri is increasing every year, because practically nothing is being done to better the condition of this class, and they are allowed through public and private neglect to increase in number. Dr. Jones says there are 5,000 imbeciles in Missouri now. Of that number 1,500 are of school age, and of these probably 500 could be gotten into such a school home as he suggests. Of the 500 fully 40 per cent. could be made self supporting throughout life, and at least 10 per cent would graduate.

A few days ago the little son of a well known physician was entertaining a play-mate at his father's house. As children will, they ransacked every nook and corner of the building. Their curiosity led them to explore the recesses of a closet in which the doctor keeps his instruments and other personal effects, among which is a complete skeleton. The strange boy was frightened when he first beheld the grinning remnant of what once had been a human being and started to run away. The doctor's son, however, had seen the skeleton so often that he entertained for it only that feeling of contempt begotten by familiarity, and in a little while succeeded in so allaying the fears of his companion that the youngsters began to handle the thing and rattle its dry bones. "Where did your father get it?" he finally asked. "I don't know," was the reply, "but I guess it was his first patient, for he's had it an awful long time."—*Bette Miner*.

The usual day press report was coming over the wires. The press operator sitting like a stoic, was "taking it off the wire" on a type-writer. With the regularity of clock-work he "pounded out" sheet after sheet. His countenance never changed. Questions of finance, the national crisis, murder, suicide, fires, a sensational divorce case, and the departure of a bandit by the Winchester bullet route never "phased" him. But suddenly he became violently agitated, stopped and listened intently to the ticking of the telegraph instrument. "Mac," he shouted to a brother operator working at the other end of the table. "Lepsic. Adeline Patti's got a child." Thereat there was great commotion and the telegraph editor became almost hysterical in gleeful anticipation of the sensation in store for the public. The story had no sooner found its way to the innermost corner of the office than the stoic at the typewriter spoke again. There was the usual dignity and weight in his tones this time: "Correction. That word 'child' should read 'chill.'" Then the telegraph editor had one.

READING NOTICES.

Chemical food is a mixture of Phosphoric Acid and Phosphates, the value of which physicians seem to have lost sight of to some extent, in the past few years. The Robinson-Pettet Co., to whose advertisement (on page 10) we refer our readers, have placed upon the market a much improved form of this compound, "Robinson's Phosphoric Elixir. Its superiority consists in its uniform composition and high degree of palatability.

ALCOHOLIC NAUSEA.—If the stomach of your patient is nauseated by the excessive use of alcoholic stimulants, administer one or two teaspoonfuls of Seng every hour or two until his stomach is O. K.

RUDY'S PILE SUPPOSITORY is guaranteed to cure Piles and Constipation, or money refunded. 50 cents per box. Send two stamps for circular and Free Sample to Martin Rudy, Registered Pharmacist, Lancaster, Pa. No postals answered. For sale by all first class druggists everywhere. Woodward, Faxon & Co. and Evans-Gallagher Drug Co., wholesale agents, Kansas City, Mo.

Notwithstanding the large number of Hypophosphites on the market, it is quite difficult to obtain a uniform and reliable syrup. "Robinson's" is a highly elegant preparation, and possesses an advantage over some others, in that it holds the various salts, including iron, quinine and strychnine, etc., in perfect solution, and is not liable to the formation of fungus growths.

There are probably more failures in the practice of medicine, than can be charged to impure drugs, than the average physician is aware.

Those who have been disappointed can frequently find information that will be of value to them, and assist them in rendering their prescriptions effective, if they will send for a little book, entitled, "Green Drug Fluid Extract, Their origin History and Rational." It will be sent free to any of our readers who will mention the **Kansas City Medical Index**, and send their address to the William S. Merrell, Chemical Co. Their salicylic acid, and salicylate of soda, made from the oil of winter green, have achieved a wide reputation. Similar products, made from coal tar are not in any way equal.

KOLA is both a necessity and a luxury to the inhabitants of a large portion of Equatorial Africa, where the fresh seed is employed as a masticatory with a view to overcome fatigue, hunger and thirst. The main reason why it has not obtained the position it deserves in this country as a tonic stimulant, is that it has usually heretofore been imported in a dried condition. F. Stearns & Co., of Detroit, Mich., are the first to prepare a preparation made from the fresh (undried) Kola nuts, and offer "Kolavin," a delicious tonic wine and powerful cerebro spinal stimulant. This retains undiminished the same peculiar properties possessed by the fresh Kola nuts, and physicians desiring to test this new product can easily obtain samples for clinical experiments by making applications for same, and mentioning the **KANSAS CITY MEDICAL INDEX**.

The seventh Special Course for practitioners in the Chicago Polyclinic and Hospital, 174 and 176 East Chicago Avenue, will commence Monday, April 1, 1895, and continue two weeks.

This course will consist of Clinical Lectures and Demonstrations from 8:30 A. M. to 10:00 P. M.

In addition to the regular daily Clinics, a number of *practical subjects* will be specially presented by the members of the faculty during this course.

The large Hospital, Clinical Rooms, Laboratories, etc., are unequaled in equipments and appointments by any institution in this country; thus affording extraordinary facilities for the general practitioner as well as the specialist.

For announcement containing full information, apply to the corresponding secretary,

174-176 E. Chicago Avenue, Chicago, Ill.

NOTE.—The Regular Clinical Course continues throughout the year.

"COMPOUND TALCUM," BABY POWDER. THE HYGIENIC DERMAL POWDER FOR INFANTS AND ADULTS.—After having found the therapeutic value of the Compound Talcum, as a dermal application, it was a desideratum of the greatest importance to make this discovery useful.

It took, for several years, all the leisure time of a busy pharmacist to bring this preparation in such shape as to make it salable for the pharmacist.

In the year 1873 it was first ready to be sold in pharmacies. In 1874 it was put on exhibition at the meeting of the American Pharmaceutical Association in Louisville, Kentucky, and created there on account of its originality and its indisputable scientific value, an unprecedented stir and commotion among the "great men," the "sages," the "autocratic rulers" of that scientific body.

In the year 1875 the "Compound Talcum" created the same excitement at the meeting in Boston, and not less also at the Centennial Exhibition (1876) in Philadelphia. In the year 1880 the "Compound Talcum" was exhibited at the meeting of the American Medical Association in New York, and in 1890, by invitation of Dr. Wales, Surgeon-General of the U. S. Navy, the "Compound Talcum" made by Julius Fehr, was placed in the Museum of Hygiene, founded in the City of Washington, D. C., for permanent exhibition.

KANSAS CITY MEDICAL INDEX,

EDITED AND PUBLISHED BY

HERMAN E. PEARSE, M. D.,

AN AMERICAN JOURNAL. BY AMERICAN WRITERS. FOR AMERICAN PHYSICIANS.

VOL. XVI., No. 4.

APRIL, 1895.

WHOLE No. 184.

ORIGINAL ARTICLES.

AMPUTATION OF THE ENTIRE UPPER EXTREMITY (INCLUDING THE CLAVICLE AND SCAPULA) FOR SARCOMA FOLLOWING FRACTURE OF THE CLAVICLE.*

BY W. W. KEEN, M. D., PHILADELPHIA, PA.

Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College.

E. S., aged twenty-one years, first consulted me early in December, 1894. In May, 1893, he broke his left collar-bone by a fall. In June, 1894, a tumor appeared at this point, which together with one-and-one-half inches of the clavicle, was soon afterward removed by Dr. Stout, of California. The tumor, however, immediately reappeared, and has grown rapidly ever since. For the last month he has been under the care of Dr. Coley, of New York, for treatment by the erysipelas and prodigious toxins, but without obvious benefit. At present there is a large tumor extending from the shoulder to the base of the neck and attached to both clavicle and scapula. It reaches to within two inches of the inner end of the clavicle. I deemed it, however, still possibly operable, because it did not seem to be infiltrating but incapsulated. This conclusion I based upon two grounds: First, that the tumor seemed to be very movable with the shoulder, and, secondly, there was not the slightest edema of the arm. This convinced me that the vessels, and especially the veins, were not yet involved. I told him frankly that it was uncertain whether I could remove the growth, but that if he desired it I would attempt the operation. Since he could at least be no worse off by its removal, and even if death followed it would relieve him from weeks or even months of great suffering. He and his family readily consented to operation.

The tumor was ulcerated at two points, and the skin was branny and thick. The conditions, therefore, were unfavorable to a thorough asepsis, but

*Read before the Philadelphia Academy of Surgery, Feb. 4th, 1895.

the parts were as thoroughly disinfected as possible. My plan was to adopt the method as described in my paper before the American Surgical Association, in May, 1894, (*Transactions American Surgical Association*, 1894, p. 55, and *American Journal of the Medical Sciences*, June, 1894), namely, to make one incision at the inner border of the tumor with its centre at the clavicle, and another at a right angle along the line of the clavicle down to the bone, to dissect these flaps, and by drawing away the tumor to uncover as much of the clavicle as possible, removing as much of the inner end as I could, and then search for the vessels. If I found that they could be easily ligated I should then proceed to remove the entire upper extremity. If, however, the vessels could not be reached that I should then close the wound and abandon the operation. Profs. Brinton and Hearn, after careful examination of the patient, both agreed with me as to the advisability of attempting it. Accordingly, he entered the Jefferson Medical College Hospital on December 24th. His temperature was then 100°. His pain was so severe and constant as to deprive him of much sleep. He was, however, generally in very fair health, though not strong.

Operation December 26, 1894. The plan outlined above was carried out. I removed two-and-one-half inches of the inner end of the clavicle. Drawing the tumor away, and scraping it from the clavicle enabled me to remove much more than I had expected. I then sought for the vessels, and was so fortunate as to be able to dissect them loose and follow them down to the upper border of the pectoralis minor. At no point did I find the tissues under the great pectoral involved. In order to tie the vessels at so low a point I had gradually extended my vertical incision nearly to the axilla and having secured the vessels I then decided to proceed with the amputation. It was evident that removing the tumor would remove so large a portion of the skin that it would be impossible to approximate the edges. Accordingly, I determined to carry my incision down on the arm nearly to the elbow and to dissect a flap of skin which was healthy from the inside of the arm, and turn it upward so that the lowest end near the elbow would become the highest when turned upward on the neck. In dissecting the arm loose I removed the larger part of both the pectoral muscles and had to tie a number of smaller vessels. The posterior incision was now made, cutting as wide of the tumor as was possible, the incision passing nearly along the posterior border of the scapula. The separation of the extremity was now readily effected, and a moderate number of vessels ligated. After renewed disinfection of the large surface it was closed. The elbow flap was turned upward on the neck and enabled me to cover the entire raw surface by skin without any tension. As the skin of the inner side of the arm near the elbow derived its nourishment not from the branches of the vessels from the axilla but lower down from the arm, its transplantation was analogous to skin grafting, and I regretted afterward that I had not been very careful to dissect from its inner surface all the fatty tissue of which only a little, however, was left. At four points I inserted between the stitches small portions of iodoform gauze to act as drains.

The patient was put in bed with apparently little shock, his temperature

being 97.6°, though the operation had lasted nearly two hours. His recovery was rapid and satisfactory, the temperature only rising once to over 100°. On the sixth day he was out of bed. A small portion of the posterior edge of the flap from the arm sloughed. But for this he would have been entirely well within ten days.

REMARKS:—At the meeting of the American Surgical Association in Washington, May 29, 1894, I read a paper on "Amputation of the Entire Upper Extremity, Including the Scapula and Clavicle, and of the Arm at the Shoulder-joint, with Special Reference to Methods of Controlling Hæmorrhage." The key of the whole situation, as I there pointed out, is very clearly the control of the hæmorrhage. In the present case operation had been declined by several surgeons on the ground that the disease was too extensive for a successful amputation. I was convinced, however, that the vessels were not yet invaded, because there was no edema of the arm, and, also, on moving the tumor in various directions it seemed to me not to be so adherent as to prevent my getting under it and obtaining access to the vessels. My impression was that I would be obliged to ligate the subclavian vessels in the first part of their course; but, after resecting the clavicle and tearing through the tissues behind it, one of my assistants was able to drag the tumor outward, and this gave me an unexpectedly easy access to the vessels, which I was able to follow down to the first part of the axillary artery and tie them there. I was the more anxious to tie them low down, because I foresaw that it would be needful to utilize the skin of the inner arm to fill the gap left by the removal of the tumor. Had this not been done a very large raw surface would have been left, either to granulate or to be covered by skin grafting. I very much feared that even so high a ligation as the first part of the axillary would be followed by some sloughing of the flap of the skin, but fortunately, only the posterior edge of this flap sloughed to a small extent and delayed the healing for about ten days or two weeks.

I was unable to follow the typical method of Berger or that of Treves, but was obliged literally to "cut my coat according to my cloth." The branch of the brachial plexus of nerves going to the great pectoral was very easily seen and was a very good guide to the vessels. Each vessel was tied with two ligatures of silk, and the vessel divided between them; the artery was tied first, in order to diminish the amount of blood in the vein, and I found this way very advantageous. The amount of blood lost was not very great, and the shock of the patient was very moderate. He made a most gratifying, uninterrupted recovery. Later, when the slough had separated, a few stitches were inserted to draw the granulating surface together.

DR. KEEN:—He weighs less by six pounds than when he entered the hospital, but the portion removed was about ten pounds, so that he has gained about four pounds. The operation was done the day after Christmas, that is, forty-one days ago. This is the second operation of this character that I have done; in both the scar was about the same, although in the former case, a young lady, the tumor was not so large. There was very little shock in either case, although the operation lasted two hours. The first patient was out of bed in

five days; this patient was out of bed in six days. The shock was much less than I expected from such an extensive dissection. The patient is now in good health.

ON A MODIFICATION OF THE "INVAGINATION" METHOD OF OPERATING FOR THE RADICAL CURE OF HERNIA.*

BY JOHN H. PACKARD, M. D., PHILADELPHIA, PA.

Surgeon to the Pennsylvania Hospital and to the St. Joseph's Hospital.

I think it can hardly be necessary to enter into any argument as to the desirableness of effecting the radical cure of hernia in every case where it is possible. My own experience is that there is great difficulty in getting trusses properly fitted, as well as in having them properly applied by the patients. Yet a truss badly made or wrongly put on, may be worse than useless; it may cause suffering and even danger to life.

A radical cure can be accomplished only in one way: by doing away with the sac as such; by obliterating the tube of peritoneum, like a glove finger, through which the descent of bowel or of omentum takes place. This is the object aimed at in all the proposed procedures, which are very many. Sédillot, in the edition of his *Médecine Opératoire* published in 1855, enumerated twenty-five, and his list was not then complete. The number has been very largely increased since that time, and especially, of course, since by the introduction and general adoption of antiseptic methods, the dangers of such interference have been in a great measure set aside. Modern surgeons have suggested and put in practice much bolder modes of dealing with the problem than could formerly have been employed. By some, as Banks and McBurney, the sac is ligated and cut off as high up as possible. Barker cuts it off at the external ring and carries the stump up to be sutured into the internal ring. Ball twists it up and applies an intercolumnar suture. McEwen and Bishop crumple it up by means of "drawing string" sutures. Bassini's and Halstead's plans are to make a new canal and a new ring; Landerer makes a plastic operation, transplanting one of the columns of the external ring. Kocher carries the sac away from its position, angulating it twice, bringing it out through an artificial opening in the tendon of the external oblique muscle and then twisting it.

I do not propose to discuss these various methods, but venture to suggest another plan by which the hernial canal can be closed, I believe securely and permanently, and the object accomplished in a simple way.

I think it may be laid down as a sound rule of surgery, that in all operations there should be as little sacrifice, and as little disturbance of the parts as possible, consistently with the attainment of the desired end.

A recent writer says that there are two requisites for an operation for the radical cure of hernia. "1. Complete elimination of the peritoneal funnel, of which no trace must be left in the canal. 2. The firmest union of the rent in the fibrous layers of the abdominal wall that can be obtained." He then

*Read before the Philadelphia Academy of Surgery, Feb. 4th, 1895.

states that "a proper operation requires the hernial canal to be laid open throughout its whole length up to the level of the internal ring, and the neck of the sac and the peritoneum beyond the internal ring to be completely loosened and dissected free for some distance beyond. Thereafter the walls of the canal must be accurately sutured and brought in the closest possible apposition." In other words, he would first lay open the abdominal wall, and then close the rent as firmly as possible. But would it not be better to avoid making the rent unless it is absolutely necessary to do so.

I think we can do away with the sac as such without any destruction of its tissues, not eliminating it or laying it open, but simply making use of it, converting part of it into a solid plug, and fastening it into the canal at its inner end, sacrificing nothing. Such invagination of the isolated sac is the essential principle of the procedure which I wish now to describe.

It will be remembered that there were in vogue many years ago a number of invagination methods. Of these perhaps the best known was that devised by Gerdy, but modified by Wutzer, and generally attributed to him. All these methods consisted in pushing up the sac along with a considerable amount of the surrounding tissue; and my belief is that to the want of isolation of the sac, and the consequent drag upon it, many failures in cases at first promising should be attributed.

Some successes were, however, attained. I operated in 1863, by a method substantially that of Wutzer, upon a young man who was desirous of entering the U. S. Navy, but was prevented by the fact that he had a right inguino-scrotal hernia. He afterwards gained his appointment, and three years later was doing duty as a third assistant engineer, the rupture giving him no trouble. Two other cases, on which I operated in the same way at about the same time, passed out of my observation before the results could be determined. And the risks and uncertainties of all such procedures were then so great that it seemed imprudent to undertake them unless in exceptional instances.

I have already said that the method which I wish now to describe consists essentially in the invagination of the isolated sac. No one feature of it, I believe, is entirely new; but as a whole it has not to my knowledge been proposed by any one else.

I expose the hernia by a curved incision, describing a semi-circular flap of ample size (see Fig. 1). This I do also in operating for strangulated hernia, as it carries the cicatrix away from the seat of trouble, which is afterward covered in by sound skin. (I have several times noticed, however, that in the final healing the scar is drawn over so as to form a straight line between its two extremities.)

The sac being laid bare, is isolated from the external ring down to its tip. Sometimes it is better to empty it during this process, which may often be accomplished by tearing with the fingers. Bassini's advice, to begin the isolation at the ring and to proceed downward, is I think, generally to be followed.

In order to secure control of the empty sac I now pass a silk thread through its wall at either side; the two ends of each are left long, and caught in hæmostatic forceps.

With the forefinger of the left hand the tip of the sac is now inverted and pushed up as far as the internal ring, or as near it as possible. (See Fig. 2.)

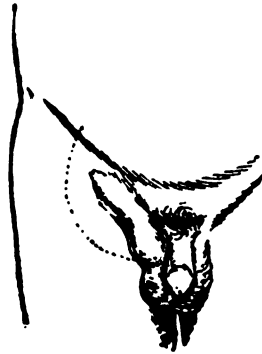


FIG. 1.

Next a slightly curved needle, with an eye near the point, and armed with a thoroughly sterilized silk thread, is passed up along the finger as a guide, to be pushed out at one side of the tip, through the tendon of the external oblique muscle. One end of the thread being caught, the needle is withdrawn slightly, and again pushed through the tendon at the other side of the tip. The other end of the silk thread is now detached from the needle, which is wholly withdrawn, and the two ends, left slack, are caught together in a hæmostatic forceps.

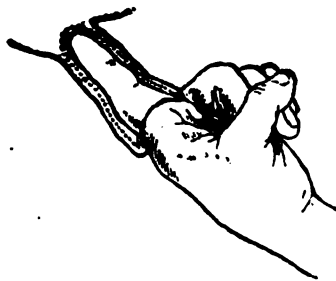


FIG. 2.

Now, by means of the two lateral threads, and by grasping in the fingers, the doubled sac is drawn down carefully, and with a small curved needle a fine silk suture is passed through it from side to side from below upward as far as possible, and then from above downward, so that its two ends, when drawn tight, will crumple up the sac into a solid mass (see Fig. 3). These ends are tied and cut off short.

The lateral threads are now removed, and the other silk thread is drawn up tight, pulling the plug formed of the sac into place at the internal ring; its two ends are tied on the outer surface of the tendon of the external oblique, and cut off short. The skin flap is laid over in place again, the wound closed by sutures, and the ordinary antiseptic dressings applied.

Until the wound is completely healed the patient is kept in bed. I have not put a truss on any of the patients recently subjected to this operation, but have cautioned them against making any muscular effort likely to bring undue stress upon the parts until time enough has elapsed for their consolidation.

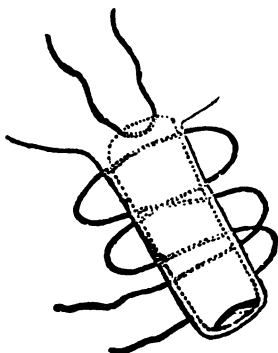


FIG. 3.

As to the ultimate results of this operation I have no cases of sufficient duration to enable me to speak positively. A man aged twenty-two years, operated on October 24th is present for your examination this evening; he does full work as an orderly at the Pennsylvania Hospital without either truss or discomfort. To my disappointment, a boy, aged twelve years, operated on December 12th, has failed to be here; there is no sign of yielding of the plug, though he is running about as heedlessly as any boy of his age. A man, aged forty-nine years, operated on at the same time, seems also to be completely relieved. On January 10th, I operated on a man aged fifty-four years, at St. Joseph's Hospital; he has since had a severe bronchitis, but his hernia seems entirely controlled, and he is now going about freely. Another man, aged thirty-two years, in the Pennsylvania Hospital, operated on January 7th, is still under treatment.

Of four other cases, including the first one, operated on in September, 1890, I will not speak, as they passed completely out of my knowledge too early for the results to be determined.

I am well aware that my array of cases is very small, but the first two above mentioned and the fourth afforded pretty severe tests of the efficiency of the closure of the canal. I offer the method as one which seems to me sound in principle and promising well; moreover, in case of its failure, the parts are in condition for the repetition of this procedure or for the adoption of any other that may commend itself.

Of course, there must be an exercise of judgment as to the suitability of any mode of operation in any given case. I think there would be difficulty in adopting the one now described in cases of congenital hernia; and whenever for any reason the sac must be extensively opened it would have to be carefully sutured before invaginating it. And I believe that it might not answer well if the canal and internal were very wide.

HEADACHE DUE TO ERRORS OF REFRACTION.

BY J. T. HAMILTON, M. D., KANSAS CITY, MO.

Formerly Assistant Surgeon, Eye and Ear Department, New York Throat and Nose Hospital.

While it is conceded that in diseases of the eye and its treatment the technical knowledge and skill required is such as to demand almost the undivided attention of its devotee, it is my purpose, in this short article, to present the importance of the study of the organs of vision and its claims upon the attention of the general practitioner. I shall not give a complete description of the various forms of headaches, and their treatment, but merely intend to call attention to the most common types of this malady which are due mainly to some error of refraction, and point out the only proper course to pursue in the treatment of the same. It is often the experience of many general practitioners, who have not made a special study of ophthalmology, to find a great number of obstinate cases of headaches, among their patients, for which they have failed to discover any cause, and which has resisted treatment after treatment; when if they would look after the defects of their patient's eyes the cause would not be so obscure, and the treatment would be more effective. I am aware, however, that the general practitioner is not always prepared with instruments for diagnosing the several anomalies of the eye, and of course without a correct diagnosis treatment availeth but little. It is also a fact that every one is not an efficient oculist, and cannot estimate correctly the error of refraction, and a physician who would attempt to use instruments in testing eyes without a thorough knowledge of refraction would do harm rather than good by giving to his patients a false feeling of security that their eyes had been examined with scientific skill.

Headache from eye strain deserves the most careful consideration. Many persons have suffered from headaches for years and years from this cause alone, without its being even suspected. Headaches due to errors of refraction, in the regions to which they belong, and the order of their frequency, may be classified as follows:

Superciliary,	-	-	-	-	40 per cent.
Vertex,	-	-	-	-	20 "
Occipital,	-	-	-	-	12 "
Occipito-frontal,	-	-	-	-	8 "
Temporal	-	-	-	-	8 "

It has been said that tic douloureux with several different forms of chorea, hysteria, nervous prostration and even mania are sometimes due to some error of refraction or accommodation. These patients are readily and permanently cured, after they have been treated unsuccessfully for years, by simply correcting the anomaly with glasses. Long continued eye troubles may be the unsuspected cause of insomnia, vertigo, nausea and vomiting. In severe occipital headache the patient will often complain of a stiffness and soreness of the muscles of the neck, and pain down the spine. Members of our profession frequently state, and even some of our most eminent writers on gynecology, still insist, that "headaches of the vertex, in women, are almost always due to a uterine or ovarian reflex." I was a general practitioner myself for twelve

years, in a small country village, in Missouri, and I admit that I had the above theory beautifully instilled into me, and I firmly believed that almost all such headaches in women were due to the presence of ovarian or uterine diseases; but my experience in refraction work at the Manhattan Eye and Ear Hospital, The New York Post-Graduate Hospital, The New York Throat and Nose Hospital, and my private practice, has convinced me that this is not so true as I once believed; for about twenty per cent. of my tabulated cases show, beyond contradiction, that some error of refraction was the cause, and that by correcting the error with proper glasses the headaches on the vertex, and the tenderness of the scalp, which followed the headaches, disappeared. Many people consider their eyes practically perfect for the work which they have to do, while it is a fact that the eyes of most persons are defective. That defect may be myopia, hypermetropia or any of the different forms of astigmatism. The eyes of most people, no matter what their occupation may be, are astigmatic to a certain extent. Roosa reports, in an article on "The Prevalence of Corneal Astigmatism in Eyes with Normal Acuity," of having kept a record of examinations of the eyes of one hundred persons, among whom were physicians, students, dressmakers, clerks, tradesmen and workmen of various kinds and classes, none of whom suspected that there was any eye strain, or that their eyes were not normal. Among these one hundred eyes only eighteen were found to be emmetropic or normal, so far as the corneal curvature was concerned, and in the whole list only two eyes were said to be entirely free from any defect. With such imperfections as this it is not at all surprising to meet so many people with headaches, and complaining that medicines give no beneficial results. To determine correctly the corneal astigmatism we have recourse to several good instruments, among which I consider the most correct and serviceable is Javal's ophthalmometer. As it is absolutely necessary for a positive objective examination of the curvature of the cornea, I must say that I know of no instrument that has a more definite and positive value than the one constructed on the model of Javal and Schiotz. But as a detailed description of instruments, of practical value to the ophthalmologist, in this article would not be appropriate, I will simply give my routine practice in all refraction cases, viz.: First, examine the eyes with the ophthalmometer; second, test the eyes with trial glasses; third, by the aid of oblique illumination, in the "dark room," examine the anterior portions of the eye; fourth, retinoscopy; fifth, examine the fundus of the eye, with the ophthalmoscope, both direct and indirect.

Errors of refraction seem to affect more females than males, and usually they are persons who use their eyes a great deal and have sedentary habits. If a person comes to a physician complaining of a localized headache, or they say they have "headache in their eyes," pain running directly backward to the occiput, pain around the eyes after sewing, reading or employment of the eyes in any near work, pain back of the eyes, throbbing sensation, pain through the temple and over the brow that is worse of evenings and better after a rest, the physician may safely say that the trouble arises from some ocular defect. In addition to the many symptoms already enumer-

ated, palpebral irritation, hordeolum or styte, chalazion, blepharitis marginalis and conjunctivitis are frequently observed.

I cannot enter into a lengthy explanation of how and why eye strain causes headaches. Suffice to say experience has taught that these pains are certainly due to an error of refraction and a consequent strain upon the ciliary muscle. That eminent author of "Errors of Refraction," Prof. Francis Valk, in answer to my question, "How do we know that eye strain causes headaches?" said: "A question seemingly easy to answer from our personal experience, because we see so many cases of eye strain in our private and clinical work, in which headache, in its various symptoms, forms the chief and determining cause why our patients seek relief. If we simply concede the fact that clinically eye strain is almost invariably accompanied by various pains in the head, and that we also know that these pains are relieved by the proper correction of any existing error of refraction, then we are justified in the broad assertion that strain upon the muscular system of the eye—either intra- or extra-ocular—will cause headache, and the only means of relief can be found in the correction of first: those errors of refraction, secondly: the tendency to insufficiency of the ocular equilibrium."

If the pains and aches are due to an imperfect refraction of the eye, we may exhaust the materia medica in trying to find a medicament that will cure our patient, but we will never succeed in permanently alleviating the distressing symptoms until they have been relieved by the scientific adjustment of glasses. By way of illustration I will refer to two cases in my private practice.

Dr. G. E., a prominent physician of Richmond, Mo., age 28, had discovered some years ago that his vision in his right eye was not normal. When reading there was a constant blurring of the vision, sharp pains in and about the eyes, and after reading for an hour or so he would have such intense headache that he was compelled to seek a rest. The ophthalmoscope showed compound hypermetropic astigmatism. Retinoscopy gave the same. Ophthalmometer showed .75 D. astig. ax 90+180—.

All tests showed the left eye to be about normal.

R. E. V. $\frac{2}{3}$ with + .50 D. S. \odot + .25 D. C. ax. 90= $\frac{2}{3}$.

L. E. V. $\frac{2}{3}$ with plane glass " " = $\frac{2}{3}$.

With this combination he very easily read No. 1 Jaeger, the finest type, from 10 to 16 inches. These glasses were ordered four months ago, and the doctor has just reported to me that he has been completely relieved of the headache and the other unpleasant symptoms with which he suffered so much before commencing the use of glasses.

Dr. M. A. Bogie, of this city, brought into my office Mrs. J—, age 34, from a neighboring city, and said that she had informed him that she "had been taking treatment for neuralgic headache for several years with no permanent relief." The patient complained of pains in different parts of the head, through the temple and over the brow, but more especially of a severe pain which ran directly backward in a horizontal line to the occiput. Dr. Bogie very correctly came to the conclusion that the eyes were the cause of her

suffering and kindly requested me to test them. On examination I found R. E. V. $\frac{3}{8}$. L. E. V. $\frac{3}{8}$. Very little improvement with glasses. The ophthalmoscopic examination showed mixed astigmatism in the right eye and hypermetropic astigmatism in the left eye. As there was pronounced spasm of accommodation I ordered a solution of atropine three times a day for four days, when the vision became,

R. E. V. $\frac{15}{8}$ with +2. D. S. \bigcirc —5. D. C. ax. 165= $\frac{3}{8}$

L. E. V. $\frac{3}{8}$ with +1.50 D. C. ax. 90 - - = $\frac{3}{8}$.

Binocular vision with these glasses was $\frac{3}{8}$ or normal.

The ophthalmometer and the test by retinoscopy both confirmed the ophthalmoscopic test after the action of the muscle of accommodation was stopped with the mydriatic. In this individual case I thought it best to correct both the manifest and latent error (the latent being the greatest). To accomplish this I ordered the repeated use of the atropine for two weeks, after which she continued to wear the glasses constantly. The above glasses were prescribed, and now, after three months, I am told that the frequent and intense headaches have entirely disappeared.

In conclusion I will say, to the general practitioner, whenever your patients come to you complaining of headache, and returns again and again, and you have failed to relieve them by medical treatment, you should study closely and ascertain whether or not the complaints are symptoms of some error of refraction; or better still, if you are not thoroughly conversant with refraction work, let some competent oculist examine their eyes and if there is an error of refraction correct it.

200 JOURNAL BUILDING.

AMPUTATION AT THE KNEE-JOINT WITH SPECIAL REFERENCE TO WEARING AN ARTIFICIAL LIMB.*

BY E. VON QUAST, M. D., KANSAS CITY, MO.

Surgeon to the German Hospital.

Two papers on amputation, prothetically considered, one by Truax, read before the National Association of Railroad Surgeons, the other by Marks, read before the Section on Military Surgery of the First Pan-American Medical Congress, are so worthy of consideration that every surgeon ought to read them and learn a lesson therefrom. As is well known no attention is paid to prothetic science in our medical schools; students are taught how to make an amputation, how to get nice stumps and every teacher rides a hobby on his modification of flaps. Most of our text-books also pass over the requirements of a useful stump for an artificial limb without dwelling on the subject scientifically. This is the reason of so many bad stumps being presented to the artificial limb maker, which reflects discredit upon the surgeon who performed the amputation, or had care of the after-treatment. The enormous demand for artificial limbs after the late war in this country, and those in Europe, has advanced the prothetic science to perfection, and a study of same ought to be

*Read before The Jackson County Medical Society.

indulged in by every surgeon, who may be called upon to perform amputations. It is true that it is more creditable to save a limb than to sacrifice it, but in this age of steam and electricity and weapons of modern warfare, amputations will retain their place in the science of surgery.

In presenting this subject to you to-night, I do this to get a thorough discussion of the same by the general practitioner and every day surgeon. At the same time I have the honor to present to you a gentleman, on whom I had the misfortune to perform disarticulation of the knee joint, after two prominent surgeons of this city had tried to save his limb in vain. He had received in August, 1890, a compound comminuted fracture of both bones of the leg, the bones had been wired, wound closed antiseptically, and limb put in plaster of Paris dressing with suspension. But no union took place and amputation was his only salvation seven months later. The fracture was near the middle of the limb; to amputate the leg, I had to remove it either a few inches below the knee, or at the joint, or at the lower end of femur. The conditions of the soft parts and bones made me select disarticulation after Prof. Stephen Smith's method, and here is the result three years afterwards. He made a speedy and uneventful recovery and wears an artificial for limb two-and-one-half years with comfort.

An examination of his stump will prove that it is preferable to a shorter one, that it is shapely and that he can endure any amount of pressure on the articular surfaces, more than any surgeon's knife could give him, and that the nodules of the femur afford excellent means for securing an artificial limb.

Disarticulation at the knee joint has been mentioned in literature at the end of the 16th century, but never became popular, in fact was dropped. Reviewed by Velpeau and performed successfully in military practice, it was again forgotten until it was highly commended by Profs. Markow and Brinton, and some European surgeons. On the battle field and in military hospitals it never became popular, and the death rate given in the surgical history of the war of the rebellion, is higher than the one on amputation of the lower third of the thigh, 59 against 47 per cent. An investigation by Brinton and Saly-mann, however, gave a mortality of 47.7-10 per cent. If you investigate the text-books on surgery you find, except in a few, only a milkwarm endorsement of disarticulation of the knee joint. They claim the stump is unshapely, club-like, not well fit for a peg, or artificial leg, and too high a death rate. Prosthetic science, however, teaches different, if Mr. Mark's word, whose artificial limbs are world renowned and whose experience is certainly of great moment, can be taken as dictation. Of course a stump below the knee is better than one to the knee, if the stump can be flared and extended, but a stump with an ankylosed knee is worse than anything imaginable and will never give symmetry to the limb.

The advantages claimed for this operation are the lesser wound, the length of the stump, and I wish to state here, that no stump is too long for an artificial limb, the ready control of the patient over it, and his ability of bearing more weight of the body on the artificial limb. Furthermore there is no risk of muscular retraction, no injury to the medullary canal, no exfoliation of bone.

Plenty of flap is very desirable in this amputation whether you use the elliptical, circular, anterior, posterior or lateral flap method. The circular or posterior flap method is not to be recommended, the anterior flap method is highly commendable, if the patella is to be retained and gives an excellent stump. The lateral flap method is the neatest one and most convenient for drainage which is so essential in this amputation. The flaps are entirely of integument, and the inner one should be a little longer to cover the larger condyle. Some prefer to retain the patella. One thing is certain, if the patella can be secured in the intra condyle space it adds very much to the value and appearance of the stump. The condyles and nodules of the femur should always remain intact. The articular cartilage of femur undergoes spontaneous exfoliation, comes away in shreds during the second or third week and soon afterward the wound closes with the cicatrix posteriorly.

Before closing this paper I desire to make a short reference to Mr. Cordier's amputation at the knee, as I had personal experience of same in two instances, and never saw a nicer result nor a more beautiful stump. In this operation with a large oval anterior flap the condyles are sawn through transversely and the patella is placed against the sawn surface, secured by the flap, sutures or ivory pins.

Gritti's and Stoke's are modifications of this operation and had many followers in military practice. They require, however, an additional amount of care and time and are no improvement on the ordinary disarticulation.

SPASMODIC CROUP.*

BY DR. CLARKE, PRYOR CREEK, IND. TER.

Mr. President and Gentlemen of the Association:

This is a subject on which we find very little literature, and one of which I am compelled to speak very briefly.

There are a number of synonyms to this disease, namely: Spasmodic croup, simple croup, false croup, and catarrhal croup.

Spasmodic croup is a catarrhal inflammation of the mucous membrane of the larynx, associated with spasmodic contraction of the glottis, characterized by paroxysmal coughing, difficult breathing and attacks of suffocation.

Among the many causes given for spasmodic croup are the following: Delayed or difficult dentition, excesses in eating or drinking, excitement and atmospherical changes. To the last of these (atmospherical changes) I attribute the most common cause, I also believe that heredity has something to do with this disease.

As to the pathological anatomy, congestion of the mucous membrane of the larynx with slight swelling and deficient secretion are about the only changes.

The attack usually comes on at night; the child perhaps having gone to bed apparently in good health, after several hours of sleep the child is suddenly awakened by a paroxysm of suffocation. The breathing is labored

*Read before the Indian Territory Medical Association, Dec. 12, 1894.

and sonorous, the cough dry, harsh and ringing; the skin cool and moist. The voice is not so hoarse and husky as in laryngitis. The discrimination must be made from so-called "true croup." The points mostly involved in this discrimination are as follows: The *abruptness* of the attack, which is not preceded by symptoms denoting laryngitis; the *violence* of the attack, in this respect differing from membranous croup; the absence of *extreme* hoarseness or huskiness of the voice; absence of fever, and of fibrinous exudation into the larynx, and finally the speedy and complete recovery of the child. One particular discriminating point in these two diseases is that in spasmodic croup by an effort of the child it may clear its throat and its voice assume its natural tone, while in membranous croup this is impossible.

Some of our authors claim that there is no liability of spasmodic croup terminating in membranous croup; while others claim that if spasmodic croup continues for several days, the inflammation may become fibrinous in character. I must admit that I adhere to the former theory. I believe the two diseases wholly dissimilar.

Spasmodic croup nearly always terminates favorably. There are very few cases on record of fatal termination.

The treatment in this disease is very simple as a rule. Hot or cold compresses about the neck, accompanied with an emetic will usually give relief.

Among the emetics used I prefer fl. ex. ipecac or hydrargyri sub-sulphas flavus. Apomorphia hypodermically is advised by some.

To ward off further attacks, bromide of potassium has few equals. Minute doses of calomel followed with castor oil, quinine sulphate and other remedies are used to prevent a recurring attack. A full dose of chloral hydrate at bed time will nearly always prevent an expected attack. Children who are prone to attacks of spasmodic croup should receive special attention as regards their clothing, diet, etc. As with many other diseases, so in this, prevention goes a long way.

COMMUNICATIONS.

"PROFESSOR OF PROPRIETARIES."

A happy thought is expressed by Dr. Blesh, of Guthrie, O. T., in a paper read before the Oklahoma Medical Association, and published in the February INDEX, which is worthy of attention.

In view of the growing and already considerable extent to which proprietary products are surreptitiously used in the practice of medicine, he says, "If this thing continues long at its present rate the time will be measurable when prescribing will be among the lost arts, and our colleges to keep abreast of the times will have a Professor of Proprietaries."

Without discussing the causes which lie at the foundation of prescribing ready made treatment, principal of which are consciousness of incapacity, slothfulness and a lack of appreciation of his duty to his patient on the part of the physician, the fact is that this practice has grown to enormous proportions, which is evidenced by the great number of so-called chemical companies existing and coming into existence throughout the country, and the prescription files of the drug stores.

This being the case, the time has come when either the evil should cease or proper provision should be made for reducing it to a minimum. Either the practice of prescribing proprietary remedies should receive the hearty condemnation from the profession which it deserves, or provision should be made in our medical schools for instruction as to this class of preparations.

From the frequent appearance of articles in medical journals of late condemnatory of prescribing proprietary medicines, it would seem as though the tide was turning against them and that the evil might eventually cure itself; yet the influence of the medical press and that of many eminent men in the profession, which are merely commercial commodities and to be had for their market price, are in their favor and with many have undue weight. Therefore, while the evil prevails nothing should be left undone both on the part of individuals and colleges to modify or subdue it.

The information furnished the profession at present as to this class of remedies comes from the wrong source—their manufacturers, those who have an interest in their sale solely commercial; and there is not any reason to suppose that these people have more honesty or integrity of character than those manufacturing the various articles we eat and use, which are represented as absolutely pure and good, notwithstanding the very general falsity of the statement. There is no more unity of interest or object between the proprietary medicine manufacturer and the physician than between the ready made clothing man and his customer—a mere matter of cold blooded trade, in which to make the most out of his business is the loftiest sentiment.

Moreover, the manufacturing chemist is not a qualified person to instruct in therapeutics, much less to compound for patients he knows nothing of. It is entirely out of his line of education and experience. His thoughts are engaged in an effort to keep his products before the profession, to keep up in the fierce competition existing among this class of manufacturers for professional patronage, to produce plausible literature concerning his goods,—in short to make his business a success financially. What does he know about bedside experiences, which alone furnish the only means of studying the value of any remedy? It is true that he supplies certificates from physicians as to the virtues of his preparations, but their writers are usually men not known to the profession, and the exceptions to this rule are such as are evidently handsomely paid for their endorsements, but in no case are such certificates accompanied by evidence of physiological study or scientific investigation, such as are usually made in the case of new remedies by reputable authorities.

Now, these considerations make it necessary so long as these products are used that some competent and unpurchasable authority should be established to instruct concerning them, and what therefore could be more appropriate than the appointment in our medical schools of "Professors of Proprietaries?"

In line with this advance would be text books by eminent teachers on the claims of proprietary medicines. This would obviate the embarrassing necessity which now exists of each manufacturer blowing the trumpet of his own products—more properly render it useless for him to do so, and would give greater respectability, reliability and dignity to this class of literature than at present obtains. Instead of the paltry pamphlet which now thrusts itself daily before the physician and which in every line assumes his ignorance and gullibility, and without a hint of apology proceeds to instruct him in the science of medicine from the proprietary medicine standpoint, there would be respectable, quiet, unobtrusive works which would be reliable and authoritative, hewing to the line regardless of consequences.

What the fate of proprietary medicines, and what the advantage to legitimate medicine would be under these circumstances is not hard to predict. The former would take their place among patent medicines to which class they es-

sentially belong, and the latter would again rise to its former dignity as a profession, assuming and performing all its duties toward the sick with fidelity, and growing in self-reliance and self-respect.

R. J. PEARE, M. D.

Canon City, Colo., March, 1895.

KANSAS MEDICAL SOCIETY.

OFFICE OF CORRESPONDING SECRETARY,
TOPEKA, KAS., March 1, 1895. }

Dear Doctor :—The Twenty-ninth Annual Meeting of the Kansas Medical Society will be held in the Hall of the House of Representatives, Topeka, on May 16 and 17, 1895. There are a great number of physicians in the State who are not members of the Society. If you are one of those be sure and arrange your business so that you can attend and join the Society. The papers read before the Society in the past are the peers of any read elsewhere, and the program this year promises to be the best one ever had, including the names of prominent men in the State and from abroad. Among those from abroad will be Drs. J. B. Murphy and Franklin H. Martin, of Chicago, and others. Don't forget the date, and take your vacation by coming to this meeting.

Very respectfully,

G. A. WALL, M. D.

Corresponding Secretary

P. S.—We are promised rates over the various railroads for the meeting.

MEDICAL ASSOCIATION OF MISSOURI.

The thirty-eighth annual session of the Medical Association of Missouri will be held in Hannibal, commencing Tuesday, May 21st and continuing three days. In order that the programme may be arranged and printed and distributed throughout the State, a week or ten days before the meeting, we ask and insist that you send the title of your paper to John H. Duncan, room 409 Union Trust Building, St. Louis, Mo., on or before May 1st, 1895. Those who desire to read papers will bear in mind that the title of their paper must accompany the name of the essayist, and that they must be in the hands of the committee on or before May 1st, in order to get a place upon the programme.

J. C. MULHALL, }
A. L. FULTON, } Committee on Scientific Communication.
J. H. DUNCAN, }

MISSOURI STATE MEDICAL ASSOCIATION.

The 38th annual session of the Medical Association of the State of Missouri will convene in the Opera House, at Hannibal, Mo., at 10 A. M., Tuesday, May 21st, 1895. Session will be held morning, afternoon and evening, closing at 5 P. M., Thursday, the 23rd. Rates have been arranged on railroads and at the leading hotels of the city. Ample arrangements for social entertainment will be made.

THOS. CHOWNING, }
E. T. HORNBACK, } Com. of Arrangements.
J. S. HOWELL. }

A little child in Brooklyn, recently had its thumb crushed by the car, making it necessary to amputate. "On account of the importance of the thumb to the hand," the court considered the injury, sufficient to warrant a verdict of two thousand dollars.

EDITORIAL.

THE APPOINTMENT OF CITY PHYSICIAN, FOR KANSAS CITY.

The INDEX wishes to ask a moment's indulgent attention from the Mayor and City Council. It does not often dip into politics, but upon occasion, such as this, can do so. We speak for the profession of Kansas City. You, honorable sirs, have shown us in the past that you have our city's good at heart, you have passed wise acts and have conducted an honorable and clean administration.

Give us now a City Physician who shall represent the brains of our profession, be he democrat, republican or what not. Let him be a gentleman, an educated physician, a well read and posted man, one upon whom we could rely in time of danger or disaster and one capable of *commanding*, if need be, the professional army of over three hundred members, that would muster to fight pestilence and death, should it threaten or attack us. He should know that at this day and date there is a science of bacteriology, and he should yoke it to its sister science chemistry, to control our epidemics and save our children. He should be a kind man who will lend an earnest ear to the calls of the poor and needy who come to him for counsel. Let him be a man of judgment. Such a one, in short, as you would willingly call into your own household, for as a member of our Board of Health he will be a guardian of our well being and mayhap of our very lives. Do *not*, please, you honorable gentlemen, do not appoint and elect a politician, a scheming, wire pulling demagogue. One who has acquired heavy "infloance" from his ward. One whose chief recommendation is that he can control so many and such ward magnates. Unfortunately we have a few such who "resemble Ceasar rather than Ceasar's wife, in that they are ambitious and not above suspicion." There are several candidates before you who as doctor's have been failures, but who hope to anchor their drifting finances to the firm rock of Kansas City's treasury. There are others who swagger about the streets and loudly swear dire vengeance on those who oppose them. Others still, who endeavor through some political friend to get upon your "blind side" (if you have one), and yet others, clean and honest, whose claims are presented to you and left with you, and the Doctor goes on about his business of caring for the sick. Select such a one, please; inquire into his record, for if men have not called him to their homes and endorsed him, there is reason for it. And as to the political doctor, the swaggering, swearing, beer drinker, the subtle wire-pulling doctor, *et id genus omne*, turn them down, honorable gentlemen, and turn them down HARD.

THE "JOURNAL" TRAIN.

The 46th Annual Meeting of the American Medical Association will be held at Baltimore, Md., May 7th, 8th, 9th, and 10th, 1895. There will doubtless be a full attendance and in anticipation of the attendance of Western doctors the *Journal of the American Medical Association*, (may its circulation increase and multiply) has had arranged a special train to leave Chicago, Sun-

day, May 5th, 3:15 P. M., and reach Baltimore on Monday, May 6th, 4:35 P. M. It is arranged through the kindness of the Pennsylvania Railroad and will bear the visitor through Pittsburg, through the picturesque Conemaugh Valley and historic Johnstown, across the Alleghenies at Cresson where is seen some of the most sublime mountain scenery in America, and for miles will follow the winding course of the "Blue Juniata." The doctors of the West will gather in Chicago and fill the beautiful train, and, of course, reader you will be there; along the way others will join and a most merry party will reach Baltimore; not tired and dusty, for we will be on the "Journal Train," and will go over the Pennsylvania Railroad, and "the methods of management and operation of the Pennsylvania Railroad are the recognized standard for the world."

The sleeping-car rates for a double berth, Chicago to Baltimore or Washington is \$5.00. Two persons may occupy a double berth at this rate. Sleeping car diagrams for "The Journal" special train will also be found at the office of Chas. Truax, Greene & Co., No. 75 and 77 Wabash Avenue, Chicago, where accommodations will be reserved on personal application or by letter. Store will be open Sunday, May 5th, from 10 a. m. until departure of train.

Physicians, particular as to the location of the berths, should make application for the necessary reservation as early as possible.

The Trunk Line and Central Traffic Associations for the occasion of the meeting have authorized a rate of one fare and a third for the round trip on the certificate plan. Under this arrangement certificates obtained with tickets purchased May 4th, 5th, 6th and 7th, will be available for return tickets at one-third fare as late as three days after the meeting adjourns, Sunday not being accounted as a day. Round-trip fare, from Chicago, \$23.20. Tickets will read to Baltimore, Md., or Washington, D. C., as may be desired.

Arrange your round trip at once with your local agent and see that your time of starting brings you to Chicago the morning of May 5th.

TWENTY-SIXTH ANNUAL COMMENCEMENT OF THE KANSAS CITY MEDICAL COLLEGE.

The twenty-sixth annual commencement of the Kansas City Medical College was held on Thursday, March 26th, at the Auditorium at which twenty-eight candidates received the diploma of the college.

The alumni of the school met at the college building, 7th and Washington streets at 2 p. m., the same day. There were alumni from Iowa, from the Indian Territory, from Nebraska, from Missouri, from Colorado and from Kansas. The faculty and local alumni were well represented, and the old amphitheater was filled. The class of '95 was represented also. After a few words of congratulation and welcome, the President's annual address was given by the retiring president, Dr. T. B. Thrush. Following this the address of welcome on behalf of the faculty was given by Dr. J. D. Griffith, dean of the faculty. Then a talk by Dr. E. W. Schauffler on the subject, "Our Purpose," in the course of which the intention of the college to enlarge its accommodations by the erection of suitable new buildings was expressed and roundly applauded. The mot-

to of "A Higher Standard for Entrance and a Longer Term of Study," was declared to be the purpose of the college for the future.

Dr. J. H. Van Eman, the veteran Professor of Gynecology, followed with a talk upon "The Doctor and the Patient," and Dr. J. B. Connell spoke about "The Doctor's Day Dreams."

The roll-call by classes followed with remarks from each representative, and a general expression from alumni and teachers of good cheer and encouragement for the future and congratulations for the successes of the past. The class of '95 was admitted in a body. The commencement proper commenced at 8 P. M. at the Auditorium.

William H. Black, D. D., president of Missouri Valley College, Marshall, Mo., delivered the address. He spoke of the model physicians from a layman's standpoint.

"I want to tell about the model physician, as a layman thinks of one. A doctor need not be handsome, although this class might qualify in that respect. But he should be clean. He should own in his own right a tooth brush. He should show a familiarity with water. On the grounds of common morality he should deport himself so as not to give offense.

As to intellectual qualification, the model physician should be possessed of great common sense. Without it he can not achieve the success he would be entitled to if he possessed it. He should have a keen sense of observation. The eye, ear and touch should be trained to appreciate delicate distinction. He must be a man of breadth, and power, and culture, and of noble views. This is being demanded of doctors as well as of ministers. He must have an education before he ever sees the inside of a technical school. I am glad to see that many medical schools are demanding such a preliminary training. The physician should be a master of logic and psychology, I do not think it is too much for us to insist on this in the physician to whom we trust the lives of our children or our own."

After the address the diplomas were awarded. Dr. Schauffler then spoke for the faculty, delivering the annual "faculty address." The five prizes were then awarded by the dean, J. D. Griffith, M. D. The first, the Holden prize of \$100, went to Harry Leslie Chambers for the highest average in examinations.

The second was the faculty prize of \$25 for the second highest average. It went to Howard Hill.

The Cyclopedia of Surgery, awarded by Prof. Griffith, for the best examination passed in surgery, went to John F. Chandler.

The Physicians Supply Co.'s case of surgical instruments for the best made plaster of Paris cast went to John C. Kitchen.

Harry Leslie Chambers came in again for the last prize. It was a case of surgical instruments awarded by Prof. Griffith for the best set of clinical notes.

After the exercises a most enjoyable banquet was held at the Coates House, at which the faculty, students and alumni joined. Dr. J. H. Thompson acted as toast master. The banquet and speeches lasted until 2 a. m., when the final parting came for professors and graduates, and the session of 1894 and 1895 was over. It has been one of the most successful in the college history.

THE TRI-STATE SOCIETY MEETING.

The Tri-State Medical Society met in St. Louis, April 2d, 3d and 4th. 1895. It is repeatedly asserted that there is no reason for the existence of this society; yet it is one of the most flourishing ones in the country. The number of papers present was larger than could be read. Many being read by title.

A number of illustrious visitors from the east were present; among which, were the graceful and polished Drs. Wyeth and Dr. Keen, both of Philadelphia, Dr. Joseph Eastman, of Indianapolis, Dr. Bayard Holmes and Dr. Byron F. Robinson, of Chicago, Dr. M. B. Ricketts, of Cincinnati, Dr. E. Davis, of Philadelphia, and a number of others.

The papers read were of excellent quality; one of the best, being the address on Surgery by Professor Wyeth, which was discussed by a large number of the surgeons present.

A Surgical Clinic was held by Dr. Keen, and one by Dr. Davis, at the city hospital, and proved a very profitable feature of the meeting.

Most of the physicians present, attended a banquet at the elegant Planter's Hotel, which had been selected as headquarters for the society, on the evening of April 3d.

A number of clinics were also held by the local talent of St. Louis, all of which were well attended.

THE HOT SPRINGS OF OUR WESTERN MOUNTAINS.

(CONTINUED.)

SOUTH DAKOTA.



"Mountain air!" What an inspiration goes with the saying! What visions of vast piles of pines and rocky gulches filled with great breaths of pine scented air, cool, refreshing and soothing to the heated heads of tired men and women. "Thanks be to God for the mountains" and Mrs. Hemans catching the inspiration writes:

"For the dark, resounding heavens,
Where Thy still small voice is heard,
For the strong pines of the forests,
That by Thy breath are stirred;
For the storms on whose free pinions
Thy spirit walks abroad—
For the strength of the hills we bless Thee,
O God, our fathers' God!"

And so instinctively one's nature stirs at the sight of mountains towering above the timber line and about whose peaks storms rage that never disturb the dwellers upon earth below, and whose ravages can only be guessed. And from the perpetual snow fields come down streams and such crystal, cold, water! and such

brave trout as love to sport therein ! And under the rock bound sides of these mountains what wonders dwell ! What cavern, metals, and precious stones are hidden beyond the knowledge of man, who needs must stand hat in hand before the awful majesty of their great strength and wonder at their beauty and their sublimity as they proudly wear their caps and mantels of snow "in very presence of the regal sun" and dare his power. One exclaims with Tell.

O sacred forms, how proud ye look !
How high you lift your heads into the sky !
How huge you are ! how mighty and how free !
Ye are the things that tower, that shine, whose smile
Makes glad, whose frown is terrible, whose forms,
Robed or unrobed, do all the impress wear
Of awe divine. Ye guards of liberty !
I'm with you once again !—I call to you
With all my voice ! I hold my hands to you
To show they still are free.

Instinctively one turns to the mountains for rest ; and so it is that nature in anticipation of such a tendency has placed in the guardianship of the hills her medicinal springs of hot water, that man might retreat from the plains of active life to the deep shadows of these cool hills and bathe and drink and be well.

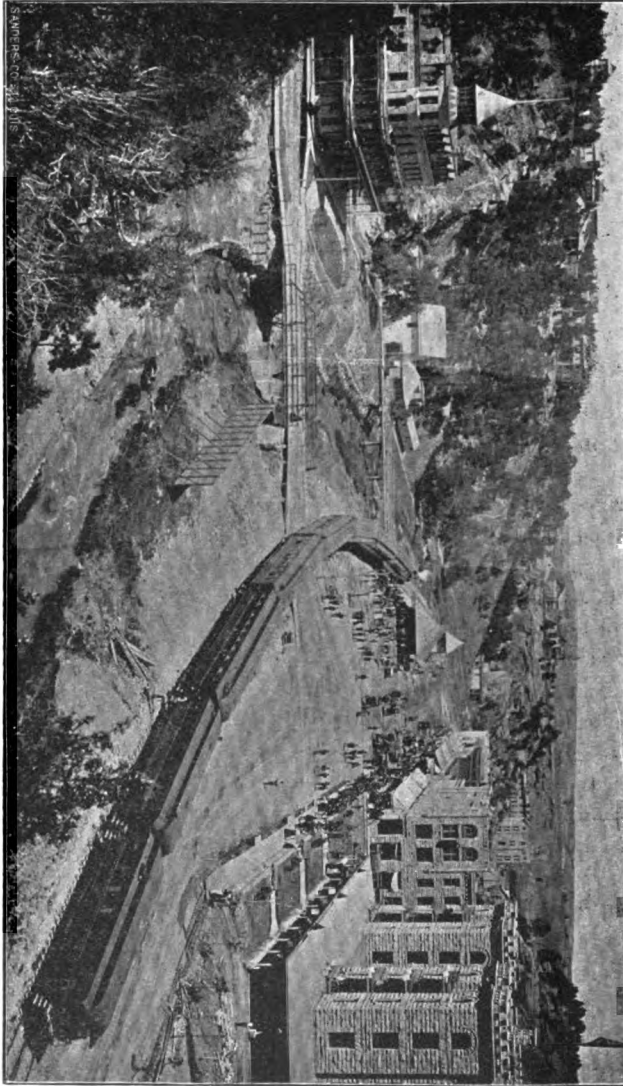
There is a vastness about the Northwest that amazes one. The forests are large, the country stretches off in miles that run into hundreds without apparent effort. There are unlimited areas that appear to be absolutely useless and others that are marvels of fertility and one recognizes the fact that he is dealing with space and scenery and surroundings on a large scale. The railroad has made it an easy matter to reach and pass its confines but otherwise it has not changed it.

Years ago rumors were rife of a great country in the "bad lands" of the Northwest, of hills covered with timber, of beautiful fertile valleys, of great gold deposits in the gravel of the streams, and when scarce twenty years ago General Custer told the world of the vast gold fields lying silently locked in these Black Hills, the rush began which ended in the purchase of the country (1877) from the Sioux and its settlement by the whites. We are not concerned with the gold, nor the rich timber, but with the medical aspect, (for there is a medical aspect) of the country, which hinges upon the fact that there are here a second out-burst of hot water in the form of thermal springs, that have already attracted hundreds of invalids who have found that health and life which is better than gold, for "All that a man hath will he give for his life," and the City of Hot Springs, of South Dakota, has become one of the established sanitariums of our country. The slow mule train with its weeks of "camping out" has given way to the elegant vestibuled trains of the "Burlington" which drop one in this wonderland in 30 hours from the Missouri river, so that the fatigue of the trip is no longer to be feared,

As in all Rocky Mountain places, one finds here sand and rocks and pine trees and cool water, and the peculiar invigorating air that tells of altitude and freshness and promises red cheeks, and sound sleep of nights, and a

keen appetite by day. Hot Springs, South Dakota, has reached a population of 3,000 people. It is no longer a desert, an outpost, but a neat thriving little city with fine hotels, modern methods of lighting by electricity, fine water works and all that goes to make the comfort of the visitor complete. It lies at an altitude of 3500 feet above sea level, nestling among the peaks

VIEW IN HOT SPRINGS, S. D.—THE EVANS HOTEL AND THE NEKAHTA BLOCK.



and mountains that tower above Fall River valley at this point, so that the storms of winter are so kept away that the climate of Hot Springs is not the rigorous one of South Dakota in general but much more even and mild. And in summer when all is hot, dusty and sultry in the valleys, the cool deep gulches send out such grateful sweeps of bracing air that to breathe is a pleasure and to live is divine.

1. What can we tell our invalids of Hot Springs, South Dakota?
2. What can we tell our neurasthenics who are not sick but need a summer resort for health?
3. What is in store for us as a pleasure trip?

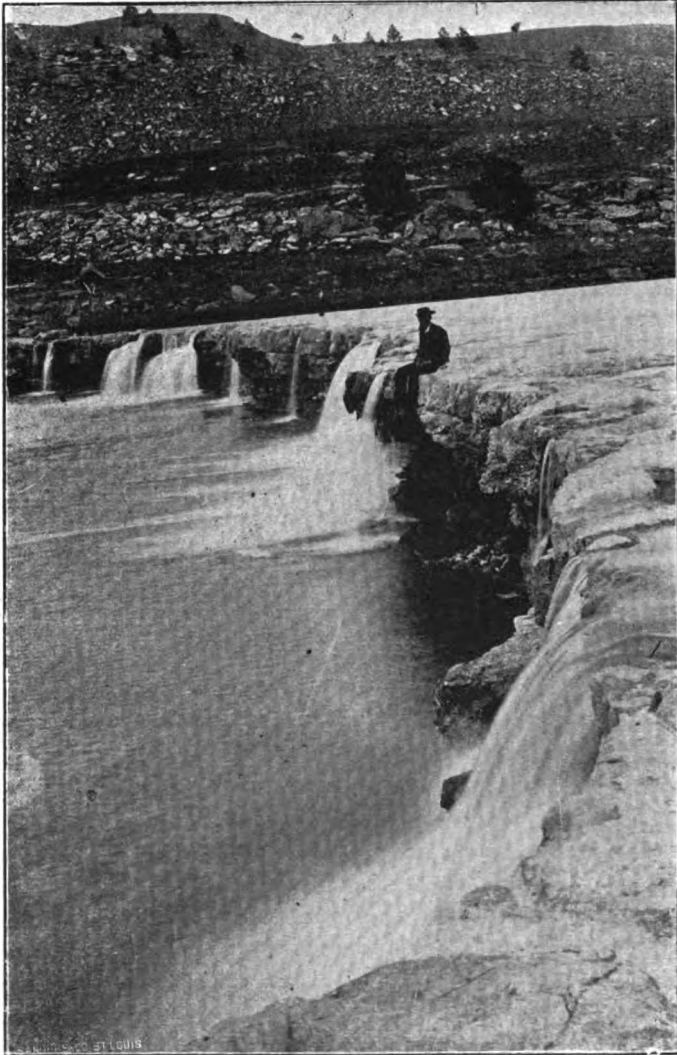
In answering the first of the above questions let us bear in mind that in the treatment of kidney diseases, Bright's disease, rheumatism, neuralgia, etc., hot baths are not curative as are warm baths, from 80° to 98° being the ideal. This pertains here. The temperature of the waters is about that of the body or lower, and forms, without dilution or cooling, a model bath. The expenses of living at Hot Springs, S. D., are light—lighter than at almost any other springs in America. The medicinal value of the waters are simply unsurpassed, so that temperature, climate, medicinal virtue and cost of living all give a balance to the gain of the patient in casting up the account.

As to the second, we can tell those seeking an ideal summer resort that at Hot Springs, S. D., one may find the clear, bracing air that God only furnishes in the Rocky mountains; the scenery of a vastness and grandeur peculiar to the great Northwest, and all at a point where tonic waters can be drunk and where warm, invigorating, salt baths can be enjoyed at a small cost, and when his purse permits and his fancy leads him he may find side trips to entertain him and beautiful scenes to rest his eyes. After learning the region just around the city he may begin these "side trips." Here is one:

"Ten miles north of Hot Springs, and reached by comfortable coaches, running every day during the summer season, is located the destined "Show Place" of America, Wind Cave, so-called because of the almost continuous outrush of wind from its mouth. Nature is seen here in its ruggedest, most beautiful and, withall, grandest aspect. Greater than the world-famous Mammoth Cave, of Kentucky, more wondrously beautiful than the Wyandotte Cave, of Indiana, or the Cave of the Winds, in Colorado, it is a most impressive object-lesson of the Power that created it. Thirteen separate routes have been explored, covering ninety-one miles of passages, although, properly speaking, there are no separate or distinct routes and no termini, as by connecting passages the routes may be indefinitely extended. Three years constant explorations have only served to dimly outline the proportions the cave may finally reach. The depth below the surface varies from three hundred to a thousand feet, notwithstanding that on the walls of the chamber in which the "Silent Lake" is located a party of United States surveyors, in September, 1892, placed the altitude of the cave at 3885 feet above sea level, Black Hills meridian. Twenty-one hundred chambers have been explored, at some places the cave being eight tiers deep. Three hundred and seventy-five chambers have been named, largely by visitors who have represented the nations of the earth, come to view this wonder-place of the century.

But these are not all the wonder places of this favored land, for excursion parties may journey to Sylvan Lake or the Falls of Fall River, which are but a short distance away. Battle Mountain, where the decisive battle between the Sioux and the Cheyennes was fought fifty-three years ago, for the possession of the country of Minnekahta, which in the Sioux language means simply "hot

water," and for the thermal springs known to the Indians in their rhythmic flowing language as Wi-wi-la-kah-ta (springs hot), offers to the good walker a view seldom surpassed in this country of gorgeous landscapes. A sunrise seen from this mountain, capped with immense boulders, "is like the benediction



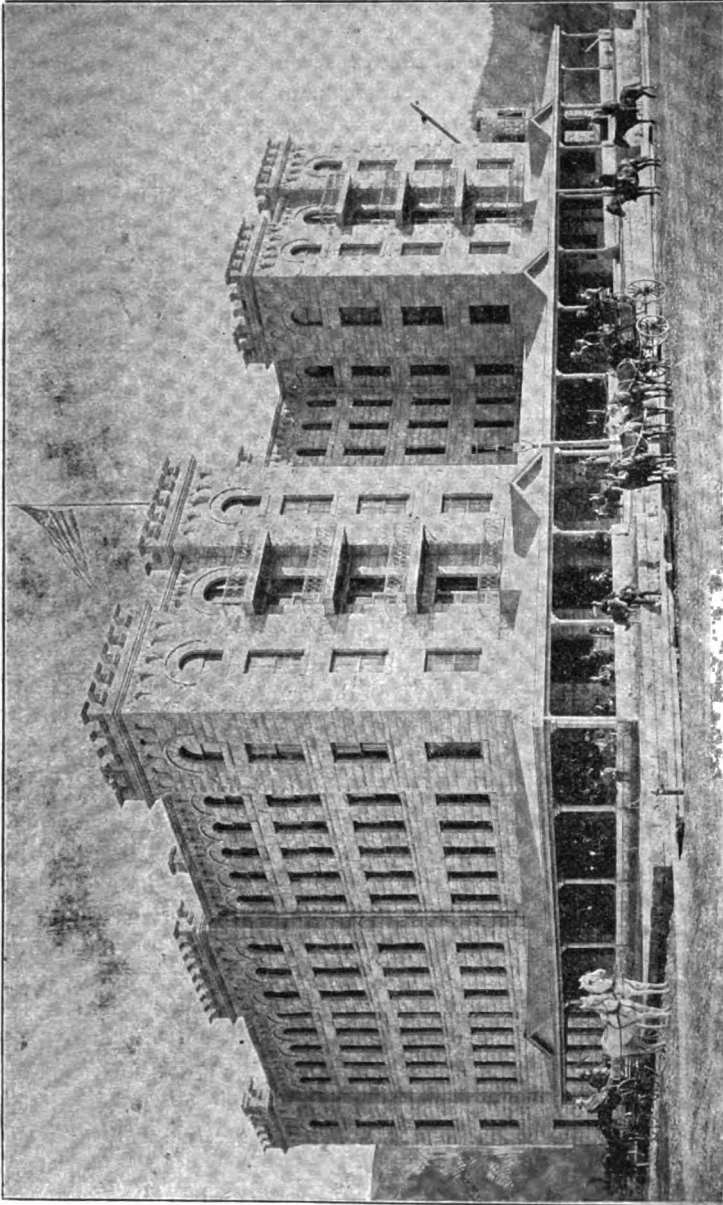
CHEYENNE FALLS, HOT SPRINGS, S. D.

that follows after prayer.." The Bad Lands of the Cheyenne River Valley hold out glittering inducements to the geologist and lover of strange fossil formations.

While in the city he will be well cared for. Hotel accommodations are excellent and prices low.

The principle hotel—the Evans—best in point of equipment and cuisine—

is a fine five-story structure of pink sandstone, capable of accommodating 300 guests. "It has wide, cool verandas, surrounding the house on three sides, where, on three nights during the week, informal hops are given, participated in not only by guests of the hotel, but by those of the other hotels, as well as



HOTEL EVANS - HOT SPRINGS, S. D.

residents of the city. Fitted throughout in the most modern manner, with electric lights, passenger elevators, spacious offices, open fire places, and cheerful writing and reception rooms, the Evans is easily the best conducted and

most delightful hostelry between Chicago and Denver." The rates range from \$15.00 to \$25.00 per week.

Then there is the Gillespie an excellent stopping place capable of holding 125 guests and insuring their enjoyment too. The rates here range from \$10.00 to \$20.00 per week. The Hot Springs House can care for 70 guests, and its rates are still lower,—from \$7.00 to \$15.00 per week. The Catholicon, 125 guests. Hotels Ferguson, Parrott, Davis, Avenue, Dudley, with a total of 225 to 250 more guest rooms, and in addition to these a long list of boarding houses, where by writing one may engage a pleasant room and board at a very moderate cost indeed.*

Each of the hotels has its bath house where the various modern appliances may be found for giving spray, vapor, electric, needle, salt and tub baths, and each has its medical director and trained assistants. The finest is that connected with the hotel Evans. The baths at the Stewart are the hottest, 103° F.

"Over Mammoth Springs, but a short distance from the principal hotels, in the north part of the city, a magnificent plunge bath, 50x250 feet, has been built of stone, iron and wood, and provided with all the conveniences and apparatus of the most famous natatoriums in the world. The water in this colossal bath-tub, which contains 300,000 gallons and varies in depth from four to eight feet, is never still, as it rushes out through an orifice at the south end of the building at the rate of 100,000 gallons per hour.

The electric and magnetic forces which one feels on entering this plunge have the effect of stimulating and increasing the heart's action, producing a slight electric shock which is not at all disagreeable and is followed by feelings of pleasure, comfort and relaxation. In addition, there is a certain something in the water which gives one the impression of having been anointed; so delicious is it that the skin feels like velvet."

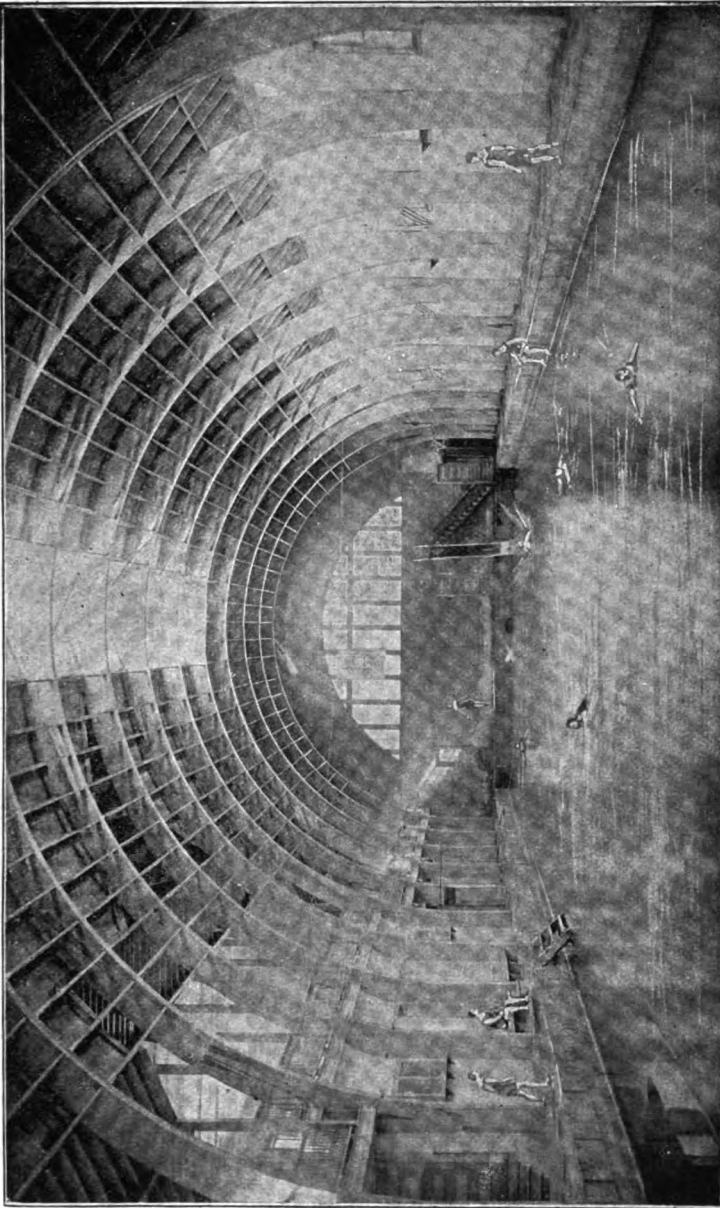
Now as to a pleasure trip for a doctor, let me tell it in the words of one who has known the country for years. "First of all after a brief rest at the hotel, *camp*. Pitch your tent or build your wick-e-up in a convenient spot and proceed to the full enjoyment of mountain life.

It being understood that the vacationist is to camp, a few suggestions are offered. Provide, first of all, plenty of bedding, not new, but mostly old blankets; mattresses too, if you do not like to repose on hay or pine boughs laid on the ground. The latter is recommended as saving trouble and transportation, though there are portable bedsteads with wire mattresses that are not very burdensome and have much to recommend them. Next, a tent or two—one for sleeping, and one for kitchen and dining room, are desirable. Then a mess-box, containing a bountiful supply of tin plates and cups, cheap knives, forks and spoons, with box apartments for coffee, tea, sugar, salt, pepper, mustard, etc. A Dutch oven with a handle, a large frying-pan with a long handle, a big coffee pot with a bale, an iron camp kettle for heating water, a dish-pan, a water bucket and as few other things as possible. An axe, of course, must not be forgotten. This is about all the outfit that is really neces-

*The ticket agent of the Burlington R. R. at Hot Springs, S. D., has kindly consented to furnish lists of boarding houses and arrange for private board when requested.

sary, though it can be added to as one's tastes dictates until it reaches positive luxury. The less baggage, the better. You will be surprised to learn how many things you can do without when you don't have them.

Having reached Sheridan, determine where you will establish your camp.



INTERIOR OF MAMMOTH PLUNGE BATH—HOT SPRINGS, S. D.

You have a hundred miles of suitable location to choose from, and while you can hardly make a mistake, there are spots that will please better and afford more enjoyment than others. On every one of the fifty streams that emerge

from the Big Horn Mountains, there are settlements. It is probable that the streams in the neighborhood of and above Dayton, which is twenty miles beyond Sheridan, are a trifle superior to any thing this side, although Piney and Big Goose Creeks are deservedly famous. Tongue River, Pass Creek and the Little Big Horn are incomparable and in matter of fishing afford larger game. The fishing is simply unequaled and unlimited. For years to come it will seem to be inexhaustible, and it will really prove so, for the state will restrain the greedy market fisherman, and for all the purposes of legitimate sport the fish of the many streams in the vicinity of Sheridan are too numerous, and the breeding grounds too extended, to allow any approach to extermination. The trout of this region reaches a weight of six pounds. Specimens of this size are, of course, not numerous, but in the larger streams, he is an unlucky or unskillful sportsman who does not bring to creel several each day that run from two to three pounds."

And is not this enough? Can one ask more? Soon the tide of fashion will set Dakota-ward and much of this will change, but now locked in the vast recesses of the Black Hills lie undiscovered treasures of health, ours for the seeking, ours for the taking; and what one of us will not be a kinder, truer physician, a stronger, better man for a rest and a vacation with wife and family in these cool shadows for the scorching weeks of summer heat? And surely the tired doctor as well as the convalescing patient needs that rest that

"Knits up that raveled sleeve of care,"

and restores him to that usefulness which only a clear brain and a strong body can give.

A NEW MEDICAL COLLEGE.

The committee appointed some time ago by the regents of the Kansas State University, to consider the proposition of Dr. S. B. Bell, to donate seven acres of ground for the purpose of erecting a medical college and hospital in connection with the state university, met the Chancellor and regents of the University on March 26th and it was decided to accept the proposition.

The college will open September 1st, in temporary quarters, at 2400 South West Boulevard, or until the buildings to be erected will have been completed. The course is to be four years,—two years in Lawrence and two years in Kansas City. The site is said to be a most beautiful and picturesque one and the location excellent as regards clinical advantages.

EDITORIAL NOTES.

THE AMOUNT OF URINE PASSED AS A DIAGNOSTIC SIGN.—Dr. M. D. Hodge, Jr., of Richmond, Va., writing in the *Virginia Medical Monthly*, says the average quantity of urine passed by a healthy male individual in 24 hours is about 1600 cubic centimeters or 50 ounces (2½ pints), for a woman one fourth less. Variations from this are diagnostic. He says:

"We may speak of a *physiological increase* of urine after careful enquiries as to the previous habits of the patient, under the following conditions:

- a. From drinking large quantities of liquid (*urina potas*);
- b. From diminished skin activity, as in cold weather;
- c. The action of diuretic foods and drugs;
- d. Increase of the general blood pressure.

The quantity may be *diminished in health* by:—

- a. Unusual activity of the bowels;
- b. Decrease of the general blood pressure;
- c. Abstaining from liquids;
- d. By profuse perspiration;
- e. By a non-nitrogenous diet;
- f. By rest.

Having now recognized the sources from which the average quantity may be either increased or diminished, we should be prepared to look for some one of the following conditions where there is a *pathological increase* (polyuria):

- a. Diabetes, mellitus and insipidus;
- b. Cirrhosis of the kidney, associated with cardiac hypertrophy;
- c. Amyloid kidney;
- d. Transition stage from acute to chronic nephritis;
- e. Pyelitis;
- f. After absorption of cedematous fluids and exudates;
- g. Convalescence from fevers;
- h. Hysteria, chorea and epilepsy;
- i. Diuretics.

On the other hand, we find the amount *pathologically diminished* (oliguria) in:

- a. Acute and chronic forms of parenchymatous nephritis;
- b. Weakened heart action;
- c. Severe anæmia;
- d. Acute catarrh of the stomach and intestines;
- e. Uræmia;
- f. Formation of dropsical effusions;
- g. Acute inflammatory diseases and fevers;
- h. Diarrhoea and cholera;
- i. Cirrhosis of the liver;
- j. The last stages of all forms of Bright's disease;
- k. Mechanical compression or closure of the ureters.

Finally we have *complete suppression* (anuria) in:

- a. The algid stage of cholera and yellow fever;
- b. Shock or collapse from internal injuries;
- c. Reflex shock of catheterization;
- d. Administration of chloroform, and especially ether.

Of course, it is understood that in this enumeration of causes of anuria, we are not considering cases of *retention*.

THE TREATMENT OF SCARLET FEVER.—Dr. W. Jamison writing for the *London Practitioner* says there are four objective points in the consideration of scarlet fever: first, the method of infection; second, the local treatment of the throat; third, the management of the skin; fourth, the isolation of the patient. His remarks are so apt and to the point that the *Medical Progress* reports them as follows:

"1. There are three routes by which scarlatinal poison can enter the system: (a) by direct inoculation, which are rare; (b) by being swallowed, a more common source, the medium frequently being milk, a fluid in which the virus grows rapidly; (c) by inhalation, the most common method of transmission. Probably in all cases the first symptoms are manifested in the throat; the second usually within twenty-four hours, as the eruption on the skin. It is almost certain that during the period of pyrexia the virus is multiply-

ing in the blood, and is in process of being conveyed to the under surface of the skin. Deposited beneath the epidermis, it rises through its layers and is finally cast off in flakes of exfoliating cuticle. Dr. J. has seen desquamation commence on the fourth day, but in the majority of instances it manifests itself from the ninth to the eleventh day. The process of "peeling" is not completed, if uninterfered with, until the end of the eighth week. It is never absent in a genuine case of scarlet fever.

2. The best application to the throat is a spray of peroxide of hydrogen, ten-volume strength, repeated from three times daily to once in two hours. It should be continued, the intervals being extended, till its application no longer induces pain.

3. As regarding the management of the skin, in the stage of exanthem we must favor the development of the rash by warm baths, which are best given at night, after which the entire surface must be smeared with eight ounces of almond or olive oil, containing a fluid dram of carbolic acid and two or four fluid drams of oil eucalyptus. When desquamation commences the warm baths must be supplemented by soap. Keep the patient in bed for three weeks, and he should not be allowed to mix with others until peeling is completed and the hair washed several times.

4. Dr. J. is of the opinion that isolation alone cannot prevent infection, but no risk exists if the antiseptic precautions described are attended to. The nurse ought to wear a cotton wrapper, which can be laid aside when she leaves the room. The bed and body linen should be immersed in carbolic solution after being taken from the rooms."

Lest the above paragraph (3) be misunderstood we would say: the entire eight ounces of oil containing 60 grains of carbolic acid should *not* be used at once lest we poison the patient with carbolic acid.

EARLY DIAGNOSIS IN PREGNANCY.—When a woman misses her menstrual period, she at once thinks of pregnancy; and, under certain circumstances, such as the desire for children, or, on the other hand, in the absence of the marriage tie, she becomes very anxious to know the facts early. Is it possible to tell her? Dr. Charles P. Noble, says (*Philadelphia Polyclinic*, November 24, 1894): It is possible ninety-nine times out of a hundred, by bimanual palpation, to determine definitely between the sixth and twelfth weeks. He relies particularly on Heager's sign, of which but little or nothing is said in the text-books on obstetrics. This concerns the relation of the cervix to the body of the uterus. The shape of the unimpregnated uterus is pyriform, flattened from before backward. When the cavity of the uterus contains a growing ovum, the corpus and fundus develop with great rapidity while the cervix grows but slowly. By six weeks the ovum has grown sufficiently to make the corpus spheroidal in shape, while the cervix has altered very little. Thus there is formed a spheroidal body resting on a cylinder, and the sphere juts out from the cylinder prominently in every direction. The corpus, too, is softened, and gives a sense of semi-fluctuation when palpated bimanually. Only two other conditions besides pregnancy can cause this sign: (1) Hematometra, due to imperforate cervix, which is very rare and has a suggestive history. (2) Intra-mural fibroid, which does not give semi-fluctuation nor uniform enlargement of the uterus. Corroborative evidences of pregnancy, in the early months are, violet discoloration of the vagina, most marked beneath the urethra, and velvety softness of the vaginal walls, with marked pulsation in vaginal and uterine arteries. Softening of the cervix, Noble considers of much less importance than is usually assigned to it, and a sign on which very little dependence can be placed. Landau (*Deutsche Med. Wochenschrift*) says the size of the uterus in the first months is much less to be considered than its form and consistence. Antelexion is increased, the portio is higher, the vagina longer, and the anterior vaginal wall seems stretched. The consistence is softer, and gives a sensation as if the examining finger was against soft butter—it penetrates, finds no resistance, and leaves no imprint.—*Southern Practitioner*.

TREATMENT OF HYDROCELE.—In the absence of an opportunity for other surgical operation, and in mild cases without considering the surgical operation, the following plan of treatment for hydrocele may prove decidedly advantageous:

"A letter from France to the *Medical Press and Circular* says that the classical treatment of hydrocele, puncture and injection of tincture of iodine or some other irritating liquid, has been rendered much more simple by a surgeon who has published the result of several cases cured rapidly by the method. He inserts the trocar into the most dependent part of the tumor and removes the liquid; he then injects a five per cent. solution of carbolic acid, which is removed almost immediately. The trocar is introduced a second time into the canula, and pushing it up toward the highest point a counter-opening is made. The trocar is again withdrawn, and a drainage tube is passed through the canula and left in position, the canula being removed. The patient can immediately get up and walk about. The drain is withdrawn on the fourth day, and in a week the man is cured."

BOOK TALK.

Books reviewed in these columns may be obtained of Dr. A. M. Wilson, rooms 412-414 New Ridge Building, Kansas City, Mo. Discounts where possible.

THE FUNK AND WAGNALLS STANDARD DICTIONARY.

The Funk and Wagnalls Standard Dictionary of the English Language, in either one or two volume editions. A carefully prepared and complete dictionary, by 247 editors and specialists, assisted by five thousand readers for quotations, and assistants. It contains 258 pages, five thousand illustrations, made expressly for this work, over three hundred thousand vocabulary terms, which is two and a half times that of any single volume dictionary, and 75,000 more than any other dictionary in the English language. Published by the Funk and Wagnalls Company, New York, London and Toronto. Price, single volume edition: half Russia, \$13.00; full Russia, with Denison's patent reference index, \$14.00; full Morocco, with Denison's patent reference index, \$18.00. Two volume edition: half Russia, \$15.00; full Russia, with Denison's patent reference index, \$17.00; full Morocco, with Denison's patent reference index, \$22.00.

This publication is of more than ordinary importance; it represents a cost of nearly one million dollars. It contains thousands of new words, never before found in a dictionary: as "pharmacal," "linotype," "kodak," "populist," "electricute," "electrocte," "appendicitis," and thousands of other similar words, that have been admitted to the English language, or to a specific meaning in the English language, within the past few years.

It appeals to the whole of the English speaking race. Most of the obsolete word have been thrown out, and new ones have taken their place. Over four thousand words came from the electrical development of the last year.

It occupies an intermediate ground between the great Century dictionary and the Webster's International. The fullness of each definition, and the care with which they are written, mark it as a work that has come to stay, and it will occupy a leading place among the dictionaries for many years to come.

Its reception by all of the great universities and schools has been most flattering. It is the work of men thoroughly skilled and competent, and we commend it to all of our readers who desire a perfect reference book.

TWENTIETH CENTURY PRACTICE.

Twentieth Century Practice. An International Encyclopedia of Modern Medical Science. By leading authorities of Europe and America. Edited by Thomas L. Stedman, M. D., New York City. In twenty volumes. Volume I. Diseases of the Uropoietic System. New York: William Wood and Company. 1895.

This is the first volume of twenty which will comprise the entire work. The latest

great Encyclopedia was that of Ziemssen, which was published before the new science of bacteriology was developed, and the present volume aims to incorporate all those points of advance which have characterized the practice of medicine and surgery during the close of the nineteenth, and the beginning of the twentieth centuries.

The first twelve volumes will be devoted to systemic affections, and the remaining eight to infectious diseases. The writers have been chosen from the countries of Europe as well as America, and, as we have a right to expect from such a work, each man who writes occupies a high rank as a medical teacher.

Volume I., which has just appeared, treats of diseases of the uropoietic system. The first article, on diseases of the kidneys, is from the pen of Dr. Francis Delafield, of New York. The classification of kidney diseases, which the author makes, is extremely simple, and assists the reader greatly in arriving at a clear understanding of the morbid changes which these organs undergo. The disease of the renal pelves, the uterus, and the bladder are presented in two excellent articles, by Mr. Reginald Harrison, London. These are followed by two systematic and lucid treatises on the diseases of the prostate and male urethra, by Dr. G. Frank Lydston, of Chicago. The diseases characterized by changes in the urine (haematuria, cystinuria, chyluria, pyuria, etc.) are discussed by Mr. Hurry Fenwick, of London, an acknowledged authority on these affections. The albuminuria of nephritis and diabetes mellitus are not included in this article. The closing treatise of the volume is one on the diseases of the female bladder and urethra, by Dr. Howard A. Kelly, of Baltimore. In this article the author describes at length his new method of examination of the bladder and ureters in the female, which we believe has never before been described in any text-book or treatise.

The illustrations, of the first and last articles especially, are beautiful in design and execution.

SUGGESTIVE THERAPEUTICS IN PSYCHOPATHIA SEXUALIS.

Suggestive Therapeutics in Psychopathia Sexualis; with Especial Reference to Contrary Sexual Instinct. By Dr. A von Schrenck-Notzing (Munich, Germany). Authorized translation from the German by Charles Gilbert Chaddock, M. D., Professor of Diseases of the Nervous System, Marion-Sims College of Medicine, St. Louis; member of the American Medico-Psychological Association; Attending Neurologist to the Rebekah Hospital, St. Louis, Mo., etc., etc. One volume, Royal Octavo, 325 pages. Extra cloth, \$2.50 net; Sheep, \$3.50 net. Sold only by subscription to the medical profession exclusively. Philadelphia: The F. A. Davis Co., Publishers, 1914 and 1916 Cherry Street.

This book owes its appearance to the favorable reception of *Psychopathia Sexualis*. As a contribution to the literature of suggestive therapeutics, the work is pre-eminent because it reports cases which have been cured, causes of diseases and methods of curing, and reports the duration of the cure.

It is translated by Charles Gilbert Chaddock, of St. Louis, professor of the diseases of the nervous system in Marion-Sims College of Medicine, St. Louis, Mo.

Works of this class are always of interest, as they describe a series of cases which cannot be treated by ordinary medicine, but must depend for their cure very largely upon the influence of the doctor over the patient, and finally of the patient over himself. This is a natural method of cure, and the book teaches us how to bring it about. It will be a valuable contribution to our works on the nervous system.

OBSTETRIC SURGERY.

Obstetric Surgery. By Egbert A. Grandin, M. D., Obstetric Surgeon to the New York Maternity Hospital, Gynaecologist to the French Hospital, etc.; and George W. Jarman, M. D., Obstetric Surgeon to the New York Maternity Hospital, Gynaecologist to the Cancer Hospital, etc.; with eighty-five (85) illustrations in the text and fifteen full-page photographic plates. Royal octavo, 220 pages. Extra cloth, \$2.50 net. Philadelphia: The F. A. Davis Co., Publishers, 1914 and 1916 Cherry Street.

This book which has been looked for so long is certainly a beauty, with its large

clear type, its many beautiful illustrations, its clear description, its hundred of cuts and with the careful arrangement by which the explanatory cuts appear in direct connection with the text they have to explain.

The key note of the volume is Election of Obstetric Surgery. The volume being written from a teachers basis, is full of the strong personality of the author, and the pages are not encumbered with the statement of what Doctor A, Doctor B, Doctor C, and Doctor D said, reinforced by more pages of statistics, but it gives logical views of a good teacher, in his own clear language, illustrated by photographs and plates that he has prepared himself, and written on the basis of an honest desire to promote progress in this branch, along which we all have need of all the light we can obtain. From its many excellent points, and its low price we expect it to receive a wide circulation.

A TREATISE ON THE PRINCIPLES AND PRACTICE OF MEDICINE.

A Treatise on the Principles and Practice of Medicine. Designed for the use of students and practitioners of medicine. By Austin Flint, M. D., LL. D., Professor of the Principles and Practice of Medicine and of Clinical Medicine in the Bellevue Hospital Medical College, New York. New (7th) edition, thoroughly revised by Frederick P. Henry, M. D., Professor of the Principles and Practice of Medicine in the Woman's Medical College of Pennsylvania, Philadelphia. In one very handsome octavo volume of 1143 pages, with illustrations. Cloth, \$5.00; leather, \$6.00.

Flint's practice has long been a landmark among works on practice. The revision of the work by Dr. Henry after Dr. Flint's death has caused a general feeling of speculation as to the result. The book has now been before the profession for some time and the verdict is favorable. The integrity of the old work remains, and the additions by Dr. Henry are bracketed in. It has been a characteristic of Dr. Flint's book that its descriptions of clinical cases and of the practical side of diseases have always been wonderfully true to life. Further than this we think the profession is to be congratulated that the publishers, in obtaining an editor, chose one so peculiarly well qualified to revise and bring up to date those articles in connection with which the greatest progress has been made in medical study, for Dr. Henry represents at once that side of professional life which appreciates all that is good and at the same time is not so optimistic as to swallow in addition much that is bad. We believe that the profession, the teachers and the students of the country will appreciate this volume as being one of the best all-around text-books which they can obtain.

"ANTISEPSIS AND ANTISEPTICS."

By Charles M. Buchanan, M. D., Professor of Chemistry, Toxicology and Metallurgy, National University, Washington, D. C. Price \$1.25.

This is one of the neatest little books which we have seen for some time. It is concise and to the point, being a synopsis of the views of several of the best surgeons in the country. The introduction is by Augustus C. Bernays, M. D., of St. Louis, Mo. To the practitioner whose time is too limited to read exhaustive treatises on this subject and to the student, whose mind may not be clear on this modern subject, we heartily commend it. Published by The Terhune Company, Newark, N. J.

WARNER'S THERAPEUTIC REFERENCE BOOK.

Warner's Therapeutic Reference Book; a very neat little pamphlet of 120 pages containing the various hints found in such reference books, viz: Weights and Measures, Rules for prescription writing, dose lists, poisons and antidotes, signs of pregnancy and 60 pages of selected medical formulæ by various distinguished men. Seventh edition. Published by Wm. R. Warner & Co. Philadelphia, Pa.

The work is finely bound (of pocket size) in red morocco and should sell at \$1.00 to \$1.25. However it is sent with the compliments of Wm. R. Warner & Co., if the INDEX is mentioned and 15 cents enclosed to pay postage and wrapping.

LITERARY NOTES.

The March issues of Littell's *Living Age* give 315 pages of the choicest periodical literature printed in the English language. In all, these five weekly numbers contain thirty-six articles, of which, perhaps the most valuable are "The Court of Ferrara in the Fifteenth Century," translated from the Italian of the Conte Gandini, by Miss H. Zimmern; "Single Chamber Democrats," by R. Wallace, M. P.; "Erasmus and the Reformation," by J. C. Bailey; "The Evolution of Cities" by Elisee Reclus; "Rural Scotland in First Half of Last Century," by H. Grey Graham; "A Visit to Dashur" by Amy Strachey; "Mr. Balfour's Foundation of Belief," by Benjamin Kidd; "An Unpublished Page in Madagascar History," by Alice Zimmern; "General Boulanger: An Object Lesson in French Politics;" and the concluding paper on "The Crimea in 1854 and 1894," by General Sir Evelyn Wood, G. C. B., V. C.

The fiction, consisting of a complete story in each number, includes "Only Kitty," by L. B. Walford; "A Curious Lottery," by Rye Owen; "The Girl who Believed in the Saints," by L. Dougall; and "Honnie, A Study of Irish Peasant Life," and "Bringing Down the House."

Each issue contains the usual page of poetry by such writers as Wm. Watson, A. St. John Adcock, Violet Fane, E. J. Reed, E. Blair Oliphant, Evelyn Martinengo Cesaresco, etc.

The April number of the *North American Review* presents to its readers a varied and interesting table of contents. In "A Last Tribute," Ex-Speaker Reed criticises the workings of the late Fifty-third Congress from a Republican point of view; Admiral P. H. Colomb, of the Royal Navy, predicts "The Future of the Torpedo in War;" I. Zangwill describes "The Position of Judaism;" and in "Nagging Women—A Reply," Dr. Cyrus Edson says a few last words on a topic which, originally started by him in the *Review*, has attracted wide notice. An important paper is furnished on "The Growing Greatness of the Pacific," by the Hawaiian Minister at Washington, Hon. Lorrin A. Thurston, who throws a strong light upon the commercial development at present going on among the nations bordering on the Pacific. "The Physician and the Social Question" is treated by Paul Gibier, M. D., and George U. Crocker asks "Does Fire Insurance Cost Too Much?" Hon. Hannis Taylor, United States Minister to Spain, writes upon "The Outlook for Parliamentary Government," while the fourth installment of the "Personal History of the Second Empire," by Albert D. Vandam, deals this month with "The Marriage of the Emperor." Other subjects discussed are "Hypnotism and Justice," by H. Merriman Steele, of Johns Hopkins University, "The Conditions of Gold Production," by F. A. Rickard; "A Word About the 'New Pulpit,'" by the Rev. C. Ernest Smith, and "The Evolution of the Irish Farmer," by George Henry Bassett.

The complete novel in the April issue of *Lippincott's* is "Alain of Halfdene," by Anna Robeson Brown. It is a stirring tale of the sea, pirates, rescuers, and Mt. Desert (then by no means so well known as now), in the days when Washington was President.

"At the Hop-Pole Inn," by Mrs. Poultney Bigelow, tells how curiously a near-sighted Englishman and his young wife were reconciled after a first quarrel. "The Defendant Speaks" to some purpose in a story by Genie H. Rosenfeld: result, a divorce is avoided.

Mary Dawson relates the innocent loves of a dancer, "The Butterfly," and her young man. Marjorie Richardson shows how the young woman who occupied "The House with the Paint wore off" procured its external rehabilitation.

Mme. Melba, one of the chief living attractions of the lyric stage, writes pleasantly of "Grand Opera," showing that the laborer in that highly cultivated field is worthy of his or her by no means niggardly hire.

Alvan F. Sanborn's papers on "Cheap Living in Paris" will be not only of interest, but of practical value, to many. Some of its statements may well astonish those who imagine that everything abroad is expensive.

Mary E. Stickney supplies an amusing article on "Bucolic Journalism of the West," with specimens. "Hiram Powers in Washington" gives an unfamiliar bit of art in history, in three letters from the sculptor, written in 1835, when first emerging from obscurity into fame, and getting no help from Webster and Everett.

"Woman's Lot in Persia" is described at length by Wolf von Schierbrand. Lee J. Vance writes of the "Evolution of Table Manners," and J. W. Abernethy of "The Womanliness of Literary Women."

The poetry of the number is by M. S. Paden, Champion Bissell, Charles G. D. Roberts and Robert Beverly Hale.

LITTLE ITEMS.

The new Mercy Hospital, at Des Moines, Iowa, is completed, and ready for occupancy.

Muscatoine, Iowa, charges a license of twenty-five dollars for transient physicians to practice there.

The twentieth annual meeting of the Arkansas State Medical Society will be held in Little Rock, Ark., May 1st, 1895.

The annual meeting of the American Publisher's Association will convene at the Eutaw House in Baltimore, on May 6th, at 9:30 A. M.

Mr. W. A. Andrews recently took an order from one firm for seven hundred dollars worth of Peptenzyme. This is one of the largest orders of its kind ever taken.

The suit between Frederick Stearns & Co., and the California Fig Syrup Co., over the use of the word Fig Syrup, as the name of a medicine has been decided in the favor of Stearns & Co.

The College of Physicians and Surgeons, of New York, has its new building well under way. It will be located at the east of the present building, at the corner of 10th Ave. and 59th St., and will connect the Vanderbilt Clinic with the main building of the college.

The Medical Aid Society of France, in which each member pays for his medical attention, from three to four francs a year (which in our money would be from sixty to eighty cents) has assumed such proportions that the regular practitioner is almost crowded out of the field.

A bill has been introduced into the Minnesota legislature, by Dr. Zier, requiring those who manufacture patent medicines and nostrums to publish their formula on each bottle, box or package. The measure is a just one and has received the endorsement of many physicians and pharmacists of the state.—*Medical Bulletin*.

Dr. G. S. Smith, in the *Boston Medical and Surgical Journal*, has reported the latest thing in skin grafting. On a little child, with a severe burn he grafted twenty pieces of frog skin, taken from a living frog. The grafts grew, and assumed the appearance and color of the human integument, and in time furnished a good covering.

J. N. Scott, instrument dealer, and Dr. A. M. Wilson, dealer in medical books and medicines, have moved from their former location, to rooms 412-413-414 New Ridge Building. Both gentlemen are advertisers in the INDEX, and the change was made too late for publication in their advertisement. Our readers will find them at the above named place.

We are favored with a copy of the *Egyptian Gazette*, published at Alexandria, Egypt, from which we learn that Dr. Grant Bey, of Cairo, a subscriber and an occasional contributor to the INDEX, was honored at a meeting of the International Congress, held in Rome, last year, by an emeritus diploma. We congratulate him upon the distinction thus conferred.

Dr. O. H. Menees, late professor of anatomy in the medical department of the University of Nashville and Vanderbilt University, died recently at Nashville after a long and severe illness. Although still a young man he was considered one of the finest lecturers on anatomy in the South. His venerable father, Dr. Thomas Menees, has our warmest sympathy.

The enterprising firm of Parke, Davis & Co., having completed their arrangements to furnish anti-toxine, have spared no pains in time and money to equip their laboratory for that purpose, as the description in the *Detroit Journal* of recent date will abundantly show. They are now ready to furnish anti-toxine from their home office at Detroit, or from their Kansas City office, guaranteeing its purity.

The 15th annual commencement of the University Medical College was held at the Auditorium, in this city, on Wednesday evening, March 20th. Thirty-eight young men received the degree of Doctor of Medicine. The annual address was made by W. Pope Yeaman, D. D., President of Grand River College, Gallatin, Mo., and was a masterly oration. The exercises closed with a banquet at the Midland hotel.

Most of our readers are familiar with the virtues of campho-phenique. The Phenique Chemical Co., of St. Louis, who manufacture this article, have recently had a powdered form of that article prepared, as a dry dressing. If it equals in efficacy the liquid preparation, and from what we have heard of it, we have no doubt but it will, it is destined to become an indispensable article in the surgeons armamentarium.

By an oversight in our March number, the date of the meeting of the Kansas State Medical Society was given as May, 1895, which should have been May 16th, 17th and 18th, and the Secretary's name is Dr. G. A. Wall, of Topeka. We also stated that the Missouri State Medical Society would meet at Hannibal, Mo., May 21st, it should be May 21st, 22d and 23d, and the Secretary is not Dr. Berger, but Dr. Joseph Fry, of St. Louis, Mo.

The Kansas City College of Pharmacy held its Commencement Exercises Friday evening, March 22d at the Academy of Music, on which occasion the title of Ph. G., was conferred upon the graduating class of twenty-five. The address of the evening was delivered by the Hon. John C. Tarsney, M. C., and the address upon behalf of the faculty by W. F. Kuhn, A. M., M. D. The exercises closed with a banquet and social hop at the hotel Savoy.

The following horrible example is brought out by the *Cincinnati Medical Journal*:

He wore one night a flannel robe,
Which brought on perspiration,
Which caused the robe to shrink so much
He died from strangulation.

Our readers will please make note, and govern themselves accordingly.

The Kansas City Medical College has under consideration the construction of a new building to take the place of their present quarters. We understand that in the neighborhood of \$25,000.00 will be expended in the construction and new equipments which together with the present equipments will make it one of the best colleges in the West. We congratulate the Faculty of this college and only wish to offer one suggestion—why not make it a four years' course?—*American Surgery*.

Dr. J. D. Porter, president of the Physicians Supply Co., was recently married to Miss Ada Blandy. Dr. Porter is a man whom doctors know as a thorough, energetic and reliable young business man. From the small beginning on Wyandotte street, the Physician's Supply Co., has grown, under his direction to one of the largest firms handling physician's goods and surgical instruments in the west, and the INDEX speaks for the new couple the same happiness and success in life, that has characterized the company of which Dr. Porter, is president, in its past career.

A new journal has appeared in the field, entitled, *The Inter-State Medical News*; it is published at Sioux City, Iowa. Its editor states, that it is eminently a child of chance; that it offers no excuse for its existence; but by reason of that existence it asks a livelihood. We welcome the *News*, and have marked it "exchange;" and being sixteen years old, we feel that we can impart one very learned piece of information apropos of its statement; it is, that in maintaining that existence, the *News* must expect to do a great deal of seeking to obtain the livelihood it expects. However, the world is before it, and we trust that it will find fields upon which it may thrive and grow.

READING NOTICES.

The Phosphates of Iron, Soda, Lime and Potash, dissolved in an excess of Phosphoric Acid is a valuable combination to prescribe in Nervous Exhaustion, General Debility, etc. Robinson's Phosphoric Elixir is a solution of these chemicals.

ENURESIS NOCTURNA.—Dr. F. Clark of Boston, Mass., writing says: "I have used Sanmetto with good results in bladder, kidney and urinary troubles. I had a man come to me from Philadelphia, Penn., who had been troubled from an infant up to the age of twenty-four years with nocturnal incontinence of urine—wetting the bed almost every night. I used three bottles of Sanmetto on him, and found it made a thorough cure. He can go to bed at eight o'clock and sleep until eight the next morning without urinating. I recommend with all honesty, to the suffering, and to the profession the great cure—Sanmetto."

RUSSIA'S EMPRESS GAINS STRENGTH. The producers of "Mariani Wine" (Vin Mariani) should, according to report, soon have a splendid market in Russia for their nerve and brain tonic, as the Dowager Empress has, at the suggestion of the Princess of Wales, drunk it since the death of her consort, with the most remarkable and beneficial results. It seems that Her Majesty is one of the many delicate persons with whom stimulating drugs like quinine, iron and Peruvian bark disagree, but such is not the case with the wine tonic referred to. It is well known that the Princess of Wales also derived increased strength of brain and nerves from it during her last great trials. Moreover, in consequence of the benefits obtained by the Empress, a great demand for this tonic has sprung up among ladies of Russian aristocracy suffering from "nerves."—*The Court Journal*, London, Jan. 12, 1895.

LACTOPHENIN.—Strauss (*Therap. Monatshefte*, September, 1894) reports his experiments with Lactophenin as an antipyretic.

In seven cases of typhoid fever in which he administered the drug, while the sedative effects were not so constantly observed as in von Jaksch's cases, it never gave rise to unpleasant symptoms. The dose was seven to fifteen grains, and never exceeded forty-five grains a day. The antipyretic action of the drug was pronounced. The writer regards lactophenin as a good substitute for perfect hydrotherapy.

In four out of five cases of facial erysipelas it lowered the temperature; in the remaining case other antipyretics also failed.

In two cases of diphtheria (one septic) the temperature fell nearly 2° C. within five hours.

In three cases of pneumonia its antipyretic action was noticeable.

In one of two cases of scarlet fever it failed to act.

In five cases of phthisis it lowered the temperature and caused profuse diaphoresis, but produced no unpleasant effects.

In one or two instances its use was accompanied with a diffuse rash.—*Univ. Med. Magazine*.

FERRATIN.—In the course of a discussion of the merits of substitutes for the inorganic preparations of iron, at a recent meeting of the New York Post-Graduate Clinical Society, Dr. Max Einhorn said, that good results had been obtained clinically from all the preparations of iron, and particularly with the more recent preparations of the albuminoids. With this latter preparation, we imitated the method by which iron was ordinarily introduced into the system from the food. He had no experience with hæmagallol, but he had tried a very similar preparation to it—ferratin. The object of using this preparation was also the same—the introduction into the system of a form of iron similar to that drawn from the food. This ferratin had first been obtained from the livers of swine, but it had afterwards been made artificially. He had tried the ferratin in a number of cases where iron had been indicated, and yet in which the stomach had been too irritable to tolerate well the ordinary preparations of iron. He had used it in about fifteen such cases without observing any digestive disturbance produced by it. He could not say that it increased the quantity of hæmaglobin more rapidly than the other preparations of iron. Undoubtedly an important part of all methods of treating anæmia was attention to the diet and the general nutrition. From his experience with ferratin he felt sure that it would not prove disappointing.—*American Therapist*, March, 1895.

LA GRIPPE WITH SCANTY SECRETION AND RETENTION OF URINE.—Sanmetto acted very satisfactorily in a case of a lady fifty-three years of age suffering from la grippe, accompanied with scanty secretion and retention of urine. Sanmetto was given in doses of two teaspoonfuls every four hours, and within twenty-four hours her urine was passed freely and without pain.

Filley, Mo.

G. M. LISTON, M. D.
U. S. Exam. Surg.

EXPOSURES TO COLD.—It matters not how careful we may be these cold winter days, we are liable to suffer from undue exposure. Muscular rheumatism and neuralgia are the two conditions so often following such exposure. No less an authority than Professor Hale, of Philadelphia, says that Salol is one of the most valued drugs for the treatment of these affections; Antikamnia is generally recognized by the profession as giving positive relief to pain, while the therapeutics of quinine make it indicated in just these cases. "Antikamnia, Quinine and Salol Tablets" each contain two grains of antikamnia, two grains of quinine sulphate, and one grain of salol furnish just the proportion mostly indicated.

I have for a number of years been subject to periodic attacks of hepatic congestion, and, after going the usual rounds without much benefit, I determined to try Peacock's Chionia. I am free to say the results obtained from the use of two bottles were eminently satisfactory. Prior to its use my urine was very light colored and it was gratifying to see it return so promptly to its normal condition. The sclerotic change was also very perceptible. Peacock's Chionia is a frequent ingredient of my prescriptions. I have had remarkable results from its use.

Shenandoah, Pa.

J. PIERCE ROBERTS, M. D.

HABITUAL MISCARRIAGE. M. D. Makuna, M. R. C. S. Eng., Lic. Med. University, Bombay. 1876, Trebeebut, Rhondda Valley, South Wales, says: I have much pleasure in expressing my satisfaction with the results I have obtained by the use of Aletris Cordial. One of my patients who had miscarried three times previously, took Aletris Cordial during the last three months of pregnancy, and was delivered of a fine healthy boy. I ordered it at her own solicitation, as she expressed so much ease and comfort after the use of the first bottle. I am now giving it to two more patients, who have miscarried several times before, and I am in hopes of good results. I consider it a valuable addition to the Pharmacopœia, on account of its anti-spasmodic and nerve-tonic proportions, and I should not like to go without it.

LOSOPHAN, ANTIMYCOTIC, DERMAL STIMULANT. Losophan, or triiodocresol meat, has proven of especial value in diseases of the skin, due to the action of parasites both animal and vegetable. In that very obstinate affection, trichophytosis barbae, it has effected a large number of cures, ringworm of the scalp also yields rapidly to its influence, while good results are reported from its use in scabies and pediculosis. Attention has also been called to the marked relief afforded by Losophan in cases of severe pruritus, especially in pruritus ani and vulvae. In chronic affections of the skin it has also been utilized with advantage, since it removes the congestion and infiltration and alleviates the subjective symptoms. While contraindicated in acute affections in the skin, it is serviceable in chronic eczema, acne, rosacea, ulcers of the leg, etc. In the employment of Losophan it is of especial importance that it should be thoroughly dissolved in oil and not simply mixed with fats.

DYSMENORRHEA.—C. F. Baker, M. D., Decatur, Mich., says: I have prescribed Aletris Cordial in two cases with very favorable results. The first a case of suppressed menses of short duration. Her age was about fifteen years. Had been regular for over a year: missed her catamenia for the first time, and suffered from headache and general malaise. The Aletris Cordial, in teaspoonful doses three times a day, set her all right in a few days. The second was a case of dysmenorrhea. Age of patient about twenty-eight or thirty years. Had always suffered extremely at her menstrual periods, unless under the influence of some narcotic, and almost always was obliged to take her bed for two or three days at each period. She used a half-pound bottle of the Aletris Cordial, in teaspoonful doses three times a day, with perfect relief from pain while under the influence of the Cordial, or to use her own words, she would not have known by her feelings that she was unwell, and not feel different in any respect than when in her usual health.

KANSAS CITY MEDICAL INDEX,

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ORIGINAL ARTICLES.

ABDOMINAL SURGERY WITH CASES AND COMMENTS.*

BY JOSEPH EASTMAN, M. D., LL. D., INDIANAPOLIS, IND.

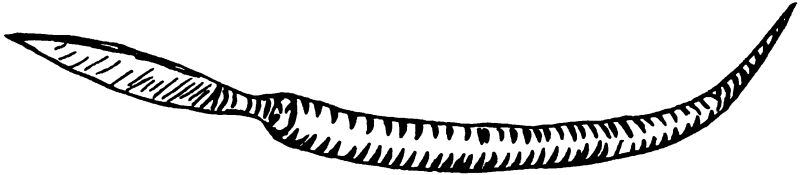
Late Professor of Anatomy and Professor of Diseases of Women and Abdominal Surgery Central College of Physicians and Surgeons.

OPERATION FOR APPENDICITIS.

From recent literature on appendicitis one might suppose the last word would soon be spoken. The technique of this operation, however, will not be satisfactory until, with aseptic hands, aseptic instruments, aseptic abdominal integument, we shall be able to continue our asepsis to the peritoneal cavity, keeping infecting fluids from healthy surfaces. True, Dr. Murphy, of Chicago, in a recent article in the *Journal of the American Medical Association*, has endeavored to show that all kinds of pus do not carry infection to healthy serous membranes. This gives us more assurance in many cases, but how are we to know in a given case what variety of bacteria may be lurking in some nook or cranny where the pericecal abscess has been burrowing about the field of our operation. In the early part of March, 1895, I was called in consultation with Dr. J. B. Shultz, of Logansport, Indiana, to see Mr. K., aged 50, a very fleshy man weighing about 225 pounds, by occupation a liquor merchant, who had been attacked four days before my visit with what he supposed was la-grippe, that disease being very prevalent in the city of Logansport at that time. An area of dullness with some indefinite pain over the cecum, elevation of temperature, rapid and irregular pulse, was about what we had to guide us in determining we had a rapidly progressive, probably suppurating appendicitis. While operating on a patient in another county a few days previous, on lifting up the lower end of the cecum as carefully as I could (after having packed the parts with gauze) at least a pint of pus and fluid fecal substance

*From cases reported at the Tri-State Medical Society, St. Louis, April 3, 1895.

from the cecum poured out into the wound. I discovered that the appendix had rotted its way so nearly through that by the most gentle lifting of the cecum I had an opening to close which would have readily admitted my finger. The dread of this together with the fact that my present patient had at least four inches of fat on his abdomen and had tasted liquor daily for many years induced me to call a halt when I had cut down to the sub-serous areolar tissue. Then with the handle of this scalpel, which I had made some



years ago, I worked my way down between the peritoneum and the abdominal muscles until I believed the end of the handle was directly beneath the cecum where I believed the sloughing appendix and the pus accumulation were located. Then pressing suddenly and forcibly upwards with the end of the handle, I soon had not less than a pint of dark greenish stinking pus pouring out on the table. Withdrawing the handle of the scalpel I introduced my finger and broke up all the partitions between pus pockets and brought out a portion of the appendix with my finger, mopped out the sinus with sponge and packed the very bottom with iodoform gauze around a drainage tube. Having drained off the pus from beneath the cecum I had expected to open the peritoneal cavity if it seemed necessary, but did not do so in this case. I believe in similar cases that as a preliminary step to opening the peritoneal cavity, such procedure as I adopted to be of great advantage, because as early as the fourth day in suppurating appendicitis I believe the chances of infecting the peritoneal cavity by lifting up the cecum to get at the appendix to be very great, and where this seems necessary, the dangers in my judgment would be materially lessened by going down "between the weather-boards and the plaster, and then breaking through the kitchen floor directly under the cook stove." And if it should prove that the pus was not beneath the cecum burrowing up the colon, but in the iliac fossa above the cecum, no great harm would be done in any case. The patient made an excellent recovery.

GASTRIC NEUROSES—THEIR DIAGNOSIS AND TREATMENT.*

BY HERMAN E. PEARSE, M. D., KANSAS CITY, MO.

The functions of the stomach are three: secretion, motion and absorption. Secretion furnishes the fluids and ferments, motion mixes them with the food and by absorption the prepared portions are taken up. Upon what do the functions depend? Why are the ferments secreted? What causes the various movements? Why and how are the functions altered? If we could assume that there was a stomach center in the brain, which presided over all the

*Read before the Tri-State Medical Society of Iowa, Illinois and Missouri, April 6th, 1895.

functions of that organ, and that nerves extend from that center to the stomach, and that upon impressions derived from this center depend all the functions of the stomach, our way would be clear indeed. Unfortunately such is not the case. We do not know how the epithelial cells of the stomach secrete the various ferments; we do not know why the regular motor acts take place. No more do we know by what means muscles anywhere in the body contract, or by what means the epithelial cells of the middle ear can change wave impulse into delicate preception of musical sounds. In considering all vital acts and the acts of all the glands of the body we must assume, as a foundation of our physiology and pathology, a specific yet absolute unknown activity of the living cell—an individuality, so to speak—a living power within itself. True this cell must have its connection with the central nervous system; yet the direct path by which the regulation of cell activity takes place is absolutely unknown.

Now as to the first function of the stomach, that of secretion. The gastric fluids and ferments are secreted by the glandular epithelial cells of its mucous membrane. Secretion is commonly excited to activity by the presence of food in the stomach, that is there are, in the nerve supply of the stomach, certain centers, capable of receiving impressions made by the contact of food, and of originating impulses and sending them back to the muscular fibers, lying in the stomach wall, and to the secreting cells. By experiment it has been found that this secretion from the presence of food takes place after all nerves passing to the stomach are severed, and we can state positively that such secretion can be accomplished by the stomach alone, independent of any connection with the central nervous system. In this respect, it does not differ from the cells of vegetables. They have glands but not nerves, and from their cells secretion may take place.

But hatred, anger, fright, as psychical influences; disgusting sights, ill news, and disgusting words, as external impressions, may suspend secretion, and their contraries may start or increase it. Hence we assert, that while secretive action of a cell is unquestionably possible for a time at least without any central nervous control, it may be highly modified and sometimes originated and controlled by it.

Now as to motion. Motion is certainly not dependent upon nerves. Sensitive plants have it in the vegetable kingdom. What takes place during the contraction of a muscle is entirely unknown to us. The power of contraction in the muscular fibers, resides in the protoplasm of its individual cells, and it is called into activity or its activity is inhibited in what way we know not, by the nervous phenomena, which we speak of as an impulse; yet that contraction asserts itself in muscular fibers, without such nervous impulse; and in fact even when severed from nerve connection, is a fact as well established as any fact in physiology, but motion is increased, diminished, regulated and co-ordinated by central nervous control.

Now, as to absorption, the same rules hold good, except that the individual activity of each cell is more pronounced here than anywhere else. Thus we conclude that digestion is carried on principally by the digestive organs them-

selves but it may be, and is modified, prevented, or entirely suspended by central nervous influences and when such an influence causes a deviation from the normal it constitutes a *neurosis*. It is reflex when it comes from some other organ in the body. It is direct when it arises *de novo* from the brain itself.

The stomach is rarely the seat of primary disease; food may be of improper amount, of improper quality or taken at improper times, yet it rarely causes more than transient trouble unless some constitutional fault handicaps the stomach in its work. The true diseases of the stomach, independent of outside influences are cancer, inflammation and ulcer. Dependent upon these are a variety of disorders. Benign growths at the pylorus or constricting bands, may cause a dilation that disappears if the obstruction be removed early. The great list of gastric disorders however, are functional and the majority of them, if the exciting cause or condition be removed, need but little care from the doctor, and in these cases medication directed to the stomach has but little effect. Aside from cancer, inflammation and ulcer the most important deviations from the normal gastric phenomena, occur:

1. As a symptom of chronic nephritis. Here uronology furnishes the key to its diagnosis and treatment.

2. As a symptom of *tabes dorsalis*—the so-called “crisis” of ataxia. The accompanying symptoms should fix its diagnosis.

3. Hepatic insufficiency so-called “bilious state,” in which the hepatic cells failing to perform their metabolistic function as rapidly as the occasion demands, the blood current is obstructed and a general engorgement takes place. The same condition may be caused by constipation. *This is always transient*, a few days fasting and a mild purge followed by a bitter tonic clearing up the trouble*.

4. Dilatation from obstruction at the pylorus.

5. General neurasthenia, in which the gastric functions like the cerebral ones are inhabited or prevented by an altered and unnatural condition of the central nervous system, sympathetic as well as cerebro-spinal; this is frequently associated with lithæmia.

6. The neuroses, hyperacidity, gastralgia, colic, hypersecretion, anacidity, eructation pyrosis, cardiac and pyloric insufficiency and the many reflexes from the sexual organs, spinal cord, eyes, etc.

In the following table of the various neuroses copied from Ewald, he has “followed a classification which is midway between the purely symptomatic and the etiological, in order that a better general idea may thus be obtained.”

THE NEUROSES OF THE STOMACH.

I. CONDITIONS OF IRRITATION.

<i>a. Sensory.</i>	<i>b. Secretory.</i>	<i>c. Motor.</i>
Hyperæsthesia.	Hyperacidity.	Eructation.
Nausea.	Hypersecretion.	Pyrosis.
Hyperorexia.		Vomiting.
Anorexia ex hyperæsthesia.		Colic.
Parorexia.		Tormina ventriculi.

*Cancer of the liver, ducts, or pancreas will often cause stomach symptoms.

II. CONDITIONS OF DEPRESSION.

Æsthesia.
Polyphagia.

Anacidity.

Atony.
Insufficiency of the
pylorus and cardia.

III. MIXED FORM.

Gastro-intestinal neurasthenia (*dyspepsia nervosa*.)

IV. REFLEXES FROM OTHER ORGANS UPON THE GASTIC NERVES.

Reflexes from the brain, spinal cord, kidneys, liver, sexual organs, and intestines manifest themselves in the forms mentioned in one and two.

The diagnosis of the neuroses then will rest (1) upon the exclusion of the above conditions, (2) by analysis, chemical and microscopical, of the urine, (3) by physical examination, (4) by tests of reflexes and careful calculation of the history of the case, and (5) by introduction of the stomach tube during digestion and proper analysis of the stomach contents, that we may discover what errors of secretion are taking place; by the salol test and similar ones, what errors of motion are present, and by the iodide of potassium test how active the absorptive powers may be. This paper will not admit of the details of making these tests and they are too well known to most of you to require it. Having determined the presence of one or more of the neuroses, let us consider the treatment, after all the most important item. Three things are essential:

1. That the exact condition be ascertained.
2. That the condition, if abnormal, be relieved.
3. That the exciting cause of the condition whether a mentality, a defective eyesight, a diseased uterus, a cerebral oedema, a secret worry, whatever it may be that is causing disturbing influences to be hurled against the poor stomach, be removed.

The first is to be accomplished by the stomach tube and the chemical tests of the gastric contents, the third by our shrewdest and most careful judgment and examination, for the second we consider:

1. Lavage: this is useful in (1) dilation, brilliantly so: (2) in acute gastric catarrh,—engorgement,—the so-called “bilious attack;” (3) In chronic gastric catarrh (after the hepatic condition has been cured): Here a little *Hydrastis* should be added to the water, and even a very weak solution of nitrate of silver, well washed away, may be used: (4.) In hiccough, and the vomiting of chloroform, both neuroses. The trouble is relieved, in most cases, by a single cool lavage. (5.) Where anacidity allows fermentation, the fermentation may be stopped by lavage after six to seven hours of digestion.

Most conditions of pain have for their foundation a fermentation coupled with such a weakening of the muscular walls that the food is not carried out with the stomach so as to allow of a complete emptying in five or six hours, and this muscular action is as essential as the other necessary factors of digestion, namely: a temperature of a hundred degrees—proper amount of pepsin and twenty-four to sixty per cent. of hydrochloric acid acidity. These conditions lacking fermentation and pain is the result. Where lavage is not permissible from the objection of the patient or otherwise, salol and charcoal are

valuable, but when one has cleared out a few of these sour, fermenting stomachs, filled with their acrid burning fluids, he loses his faith in the ability of small tablets, or anything else short of thorough removal of the offending contents and clearing of the stomach cavity, to cope with the trouble.

2. Hydrochloric acid should be used only where its absence interferes with digestion and should be supplemented by such constitutional and local treatment as will remove the anacidity, such measures are exercised, massage and the stomach douche in atony, warm general baths and the electrization of the spine in neurasthenic anacidity, etc., regulating the diet of course, to leave as little fermentation to occur as possible, that is excluding the starch and sugar from the diet.

3. Of pepsin the same may be said, we should use it only temporarily while general and local treatment seeks to call back the suspended secretion of the peptogenetic cells, and depend upon general treatment to cure the apeptic condition.

4. Miscellaneous drugs and medicines. The vomiting of the neuroses is quite well controlled by chloroform water, and occasionally by the old formula of equal parts of iodine and creosote, given in drop doses.

The prescription of Ewald for hysterical and nervous vomiting is good.

℞ Morph. hydrochlor. gr. iij.
Cocaine hydrochlor. gr. v
Tr. belladonna ℥ij
Aqua amygdale amarar, q. s. ad. ℥j

Mix. Dose, ten to fifteen drops; repeat each hour if needed.

Morphine—in fact opiates in all forms (and the same is true of cocaine) must be used with the greatest care to avoid the habit. Let me insist upon this. These neuroses are the very cases that breed *fiends*, and do not let them lay their misfortune at our doors.

I like the action of condurango in these cases of nervous atony, used as an infusion of the bark.

Iron and arsenic are two standbys; the iron given by the extemporaneous formation of the albuminate, by dropping three to five drops into dilute albumin, that is white of egg and water, or in constipated and rheumatic cases by giving with an effervescent drink, as the citrate of magnesia or Tarrant's Aperient. The ferruginous waters of our mineral springs for those that can afford them are often agreeable and act exceedingly well.

Arsenic should always be given after meals of course, when the presence of food will prevent irritation and I prefer as a rule the acid solution of arsenious acid,—the liquor arsen. chloridi of the old pharmacopœia. It should be thought of in pure neuroses only, never in inflammatory conditions.

Bromide of strontium is an excellent remedy, among the new ones; a sedative and antiseptic as well a quieter of reflex disturbances. The treatment of the cause must ever be kept up, and will often require the fullest degree of judgment on the part of the practitioner. One must be ready to treat intelligently the nervous system as a whole.

As to diet, I am a believer in full feeding, to the capacity of the stomach—for digestion. Diet must be arranged after chemical analysis, to

meet the demands of the system, not to remove all work from the stomach. The stomach tube must guide us in the selection, and if the functions of digestion are well performed, the diet should consist of such albuminoids and proteides as can be digested, on account of their ultimate effect upon the organism. I often find it necessary to be almost harsh with these neurotics to get them to leave off the stomach douches and treatment when no severe organic lesion exists, and it requires the same tact to get them to eat, after their often foolish dieting as is required to get a patient to walk after a long time in bandages and splints for a hip fracture. They insist they cannot eat, that they "almost die" if they leave their rigid stint of toast and egg and tea, or whatever they have decided upon, and are astonished to find that they can eat and improve.

There are a number of new remedies that are promising wonders in the cure of those old cases where, from nervous action the cell secretion in the stomach and intestines has been altered for so long a time that organic change is taking place—chronic nervous dyspepsia. One of these is neuclein and its class, as urged for nearly all chronic conditions by Dr. Victor C. Vaughn, of Ann Arbor, Mich., John F. Aulde, of Philadelphia, and others. Parke, Davis & Co., manufacture it and can furnish literature concerning it.

Peptenzyme, the new product of Reed & Carnrick, has been more successful than any other yet tried in calling back cell activity after it has been suspended. It will be only after much more careful experimentation that its full clinical value will be known. Enough has already been done to place it in the front rank of our remedies for combating the neuroses of secretion. Dr. W. A. P. Andrews, of Kansas City, Mo., can give some valuable literature upon this remedy, or the manufacturers direct.

In conclusion let me urge

- 1st. That we diagnose our cases of stomach disturbance accurately.
- 2nd. That we base our diagnosis upon extended examination of the whole economy and upon chemical examination of the stomach contents.
- 3rd. That we base our treatment upon our diagnosis in a clear and logical manner.
- 4th. That the study of diet be made in the light revealed by study of the chemistry of digestion.

PELVIC PAIN INDEPENDENT OF ORGANIC DISEASE.

BY R. T. SLOAN, M. D., KANSAS CITY, MO.

Professor of Physiology in the Kansas City Medical College.

In the present status of the practice of medicine, and with the prevailing methods of investigating diseased conditions, whereby the effort is made to discover a structural change to correspond to each separate abnormality of function, the tendency seems to be to classify the smallest number of symptoms together and give to that group a particular name, regardless of the fact that those few phenomena may represent a general, as well as a local condition, and in our zealous endeavor to effect a refinement of diagnosis in accordance with

the local symptomatology of the parts to which our attention has been directed, we may overlook a *general* pathological condition of which the symptoms complained of may form but the local expression. The object of this paper is to call attention to the possible influence which may be exercised by temperament and diathesis in producing or causing pain, when the pelvic viscera of the female becomes the seat of either functional or organic derangement.

As is well known, the menstrual function may be influenced in various ways by acute constitutional disease, producing at times a menorrhagia, by exciting hyperæmia of the pelvic organs or by occasioning blood changes which predispose to hemorrhage; at other times causing amenorrhœa in consequence of mal-nutrition. Likewise chlorosis, tuberculosis and other chronic systemic diseases are usually accompanied by anæmia and scanty menstrual flow, or, in rare instances, by an over-profuse menstruation, on account of the deficient and vitiated blood supply natural to those conditions. So, also, it is reasonable to suppose, may the various abnormalities of the general system, acute or chronic, materially affect the peripheral sensory nerves which connect the pelvic organs with the central nervous system, and give rise to the sensation of pain.

Morbid conditions of the nervous system have long been recognized as a factor in pelvic pain, though they have hardly received the consideration which their importance deserves, and especially is this true of the sympathetic system of nerves.

It is a common experience with the practitioner of medicine to be confronted with cases of pelvic inflammation presenting apparently equal degrees of local changes, and similarly situated, but differing very widely in the amount of suffering; or to see one patient with extensive lesions and little or no pain, and another exhibiting very slight pathological changes and an amount of pain seemingly entirely out of proportion to the physical signs—the difference lying in the condition of the nervous system of the individuals, or depending upon a diathesis in the one which is not present in the other. The second case has cerebral cortical cells more finely attuned to impulses from the peripheral sensory nerves, a more exalted nerve sensibility, or else, she is affected by a rheumatic or lithæmic condition which produces hyperæsthesia. We hear of metritis as causing facial, intercostal or sacral neuralgia; why not consider the possibility of *all* the pain being caused, or in the case of the uterine trouble, aggravated, by a neurotic temperament, especially in view of the fact that we may meet, on the same day, with another case, presenting similar physical signs, but none of the suffering?

In hysteria we see notable examples of pain entirely independent of any anatomical or pathological condition—cases so common, that it would be useless to dwell at length upon them in this brief article. Aside from these, and pains due to neuralgia, neurasthenia, and reflex disturbances, I believe in the existence of another class of neurotic pains—*habit pains*—occasioned, perhaps, primarily by organic lesions, but continuing after the removal of the original cause. I think I have seen several instances of this. Perhaps some of the pains following oöphorectomy, not due to adhesion, would come under this class.

A few years ago I read an article by an author whose name I have unfortunately forgotten, (and indeed I do not recollect the title nor the journal in which it was published)—which suggested the probability of rheumatism and gout being often-time the chief agents in the causation or aggravation of pelvic pains. Although unable to find any literature upon the subject, I think I have seen a few cases which seemed to bear him out in his proposition. When we consider that a lithæmic patient may suffer pain in other internal organs, it is not difficult to suppose that rheumatism and gout may also affect the uterus and its appendages. In an habitually constipated woman, fermentation of retained fæces might result in the formation of toxic products, which, being absorbed, would render the economy less resistant to rheumatic infection, even though she possessed no hereditary susceptibility.

I will beg your indulgence for a few minutes longer while I briefly refer to a case which seems to present some slight excuse for the ground that I have taken: Mrs. Y., æt. 30, blonde, florid complexion, has had one pregnancy which was terminated by forced abortion—this occurring 10 years before. For about seven years, during the greater part of which time she was under treatment at intervals, she had suffered from periodical attacks of severe pain in the region of the uterus and adnexa lasting two or three days and followed by considerable soreness for several days longer. She gave a history of frequent headaches, nervousness, rheumatoid pains in trunk and extremities, irritable stomach, and the attacks above mentioned, which had been diagnosed as cellulitis. At the time of her first visit to me, she had but recently had one of her painful paroxysms, and complained of great tenderness in the lower part of the abdomen. Accordingly I could make no thorough examination, but introduced tampons of cotton and wool, saturated with ichthyol and glycerine, and after the subsidence of the soreness, examined her carefully, but could find no lesions. I treated her with tampons after two or three mild paroxysms, which, by the way, were independent of the menstrual epoch, and was told by her that her mother had suffered from similar attacks and had a great deal of rheumatism. A urinary examination revealed uric acid crystals, and I diagnosed "gout," but colchicum gave no relief in the next paroxysm. Finally I saw her in one of her severe attacks which she called cellulitis, and, notwithstanding the intense pain, I insisted upon making an examination, which resulted in finding no physical signs of inflammation; her temperature was 100½° F. Morphine hypodermically and iodide of potash (*by the mouth*) gave prompt relief and shortened the attack.

Now uric acid denotes gout, whether the acid is the cause or the consequence of gout; possibly, some derangement of the sympathetic system causes both. In this case, the gouty condition may have been only a coincidence, and not the cause of the suffering, but the absence of physical signs, the perfect freedom from pain in the pelvis in the intervals, though at such times she often suffered from headache, or indigestion, seems to me to argue strongly that the lithæmic condition was the sole cause of her trouble.

As a matter of clinical experience I may say that I have often quieted pain in chronic inflammatory affections of the uterus by administration of

anti-rheumatics—the salicylates, and I fully believe that the study of the temperament or diathesis of the gynæcological patient, with proper remedial agents devoted to that end, will often render material assistance to the practitioner when the local treatment is not giving satisfaction to either himself or his patient.

It is hardly necessary to enter into details as regards therapeutics. Obviously the general morbid conditions should be relieved in addition to the treatment of the local lesion if any be present. If there be a neuroses it should be given careful attention; if a diathesis, the diet should be restricted accordingly, and the usual hygienic and medicinal measures employed. Altogether too often does it happen that the failure to recognize the general condition of the patient, together with the useless and even harmful prolongation of energetic local treatment, results in no benefit to the suffering patient. One may admire the perseverance, if not the judgment, of the enthusiastic M. D., who, unmindful of other factors causing distress, and undaunted by the fact that the symptoms have survived the disappearance of the metritis, or whatever it may have been, still flourishes his swab and curette, as if with a grim determination to destroy even the very site of a previous lesion. Is it any wonder then, that many a patient, whose nutrition was far below par as a result of insufficient exercise in the fresh air and sunshine, has had full reason to bless the “Christian Science Healer,” who, however false his theory and however mercenary his motive, nevertheless, by insisting that the patient *walk* each day to his office, became the blind medium of awakening a healthful reaction.

TETANUS PUERPERALIS.

BY GEO. C. MOSHER, M. D., KANSAS CITY, MO.

Professor of Obstetrics in the Kansas City Medical College.

This is a topic which carries us into the realm of bacteriology, where the greatest advances in medicine of the future must be made. While those of us who took our preliminary medical studies when the microscope had not yet revealed many of the secrets of pathology which have since made clearer to the student the causes of the diseases which afflict humanity, and while we may not be adepts in differentiation of micro-organisms, still we owe it to ourselves and to our patients to have a passably familiar knowledge of the various bacteria which have thus far been identified.

The bacillus of tetanus was first isolated by Nicolaier in 1884, in case of a person who had died from tetanus following an infected wound. In 1889 Kitasato first obtained the specific bacillus from pure cultures after many unsuccessful experiments to excite the disease had been made by other observers. The theories as to the origin of tetanus had all been unsatisfactory until the brilliant work of Nicolaier, Kitasato and Brieger demonstrated the identity of the bacterium—a slender rod, which upon formation of the spore, expands at the one extremity, taking the shape of a drum stick. It is but slightly larger than the bacillus of mouse septicemia, therefore one of the minutest of the bacilli.

The fact that so many cases of cap-pistol injury to small boys on 4th of July celebrations are followed by tetanus, 92 cases being reported in 1889, is now easily explained by the knowledge that a boy's hands are usually covered with dirt in the process of making glorious the Nation's birthday, and since it is demonstrated that the bacillus has its habitat in common garden earth, horse manure and even in mortar of old masonry, a wound of the hand is easily infected if the microbe exists in the particular soil he has on his hands at the time. It is interesting to note that Nicolaier in 140 experimental inoculations of animals with earth brought from various sections induced a disease resembling human tetanus in 69 cases. In mice the inoculations were followed in one and a half to two and a half days, in rabbits from four to five days by cramps, first in the region of the inoculation, later the jaws became fixed and the muscles of the legs back and neck were soon affected; death occurred in the mice in 12 hours, in rabbits in $1\frac{1}{2}$ to 2 days. Dogs did not react at all to the inoculation. No pronounced post-mortem changes were made out. At the point of the injection there was a slight quantity of pus and in this, under the microscope a number of micro-cocci appeared, especially prominent being a drum-stick like rod with spores. In 64 out of 68 attempts Nicolaier was able to produce the disease by taking pus from the wound of one animal and inoculating another. Tetanus was excited in animals by inoculating them with urine from other animals suffering from the disease. Kitasato first succeeded with pure bouillon culture in producing a fatal tetanus. The immunity of animals, rabbits, dogs and mice which Behring and Kitasato demonstrated is a result of their experimental investigation of the highest practical importance. They were successful in so treating infected animals that these were cured and also in healthy animals the injection acted as a prophylactic, preventing them from being affected by the poison at any subsequent time. They have therefore suggested an antitoxine for use in man to prevent as well as to cure the horrible malady and the future must determine the value of the remedy, for we have no authentic records as yet of attempts made to test its efficacy in the human being.

I may be pardoned for thus going over the technical part of this subject because it so suggests the hopelessness of the treatment of tetanus under any circumstances.

The one case of tetanus in the puerperal woman which has come under my observation occurred in May, 1893, the history being as follows: May 12th, Mrs. F. had an abortion at the third month, whether induced or not I was not able to learn. Things went on well until May 17th, the fifth day, when she had a chill followed by fever. I was summoned then for the first time and told that she had hoped to conceal the fact that she had had a miscarriage but she had become frightened by the chill and the dread of fever and sent for me. I found a temperature of 105° , a pulse of 120. Gave her an intra-uterine douche followed by a curettement which removed a mass of secundines, and into the os was inserted freshly sterilized iodoform gauze and I had the satisfaction of seeing a fall of $1\frac{1}{2}^{\circ}$ in temperature before leaving. The treatment internally was calomel, followed by quinine and phenacetine.

The 18th the temperature was better, but the 19th it ran suddenly up to 104°. Assisted by Dr. T. M. Overall the curetting was repeated, with a result almost *nil*. The temperature, however, fell after the douche. The gauze was repeated. On the 20th a temperature of 103° followed another chill and the douche was again resorted to with a satisfactory result. From this time on the condition gradually improved up to the 25th. A daily vaginal douche was given by the nurse, and on the 25th the patient was discharged convalescent to all appearances. She was anxious to be up the following Sunday, but I prevailed upon her to wait until Tuesday, which she consented to do. I did not see her again until Monday evening when I was hastily summoned by telephone, the message being that the condition was very alarming. I responded and found her with trismus, the jaws fixed about half an inch apart, she was perfectly conscious and rational but extremely nervous and irritable. The temperature at this time was 102°. The face had the characteristic look due to muscular spasm. In a minute the cramp began in the back, as soon as a hand was laid on the body a contraction of the group of muscles touched followed. This condition continued, she being more and more constantly convulsed, the temperature running higher and the body being covered with a clammy, sticky sweat. Every noise, a closing door, the passing car, a dog barking, increased the contraction. Opisthotonos was nearly complete, the occiput and heels alone touching the bed. An intra-uterine injection of bichloride 1-2000 was used with the idea of destroying the bacilli but of no avail. The increase in temperature corresponded to the gravity of the other symptoms and continued until her death which occurred May 31, four days after the first indication of tetanus. The urine was examined during the first week as well as after the advent of the contractions and showed constantly the presence of albumin in small quantity, due no doubt to the cramp-like pressure on the renal arteries. The treatment of the tetanus was as usual; hypodermic injection of morphine, inhalation of chloroform and the use of chloral hydrate.

In looking over the case afterward it was found that a piece of old carpet had been placed on the bed under the patient in lieu of the pads which had been used while the case was under treatment, and to my mind it is clear that this was the source of the infection. The gauze used was freshly sterilized and all instruments rendered aseptic, so that it can hardly be charged that these were the carriers of the bacilli. It was suggested by Dr. Sharp, who saw the case with me and who made cultures from the vaginal secretions that the inoculation with mouse serum be tried, but we had not the antitoxin at hand so had to rely upon routine remedies.

I have heard from a patient whom I attended since, that a neighbor of hers in Denver lost her life from lock jaw following confinement. She was at the end of ten weeks following her labor, sitting on the ground watching her child of two years playing, when she "took cold" which threw her into lock jaw which was fatal. Is it not probable the infection in her case was from the garden earth which attached itself to her clothing?

The literature of puerperal tetanus is exceedingly scanty. Hamilton, Ramsbotham, Meigs, Charpentier, Tarnier and Lusk do not mention it.

Winckel says the cases are rare and may be caused by tamponing after hemorrhage, after abortion as well as after labor, or after operative procedures.

Parvin who gives the most extensive account of the disease of recent text-books says that thirteen cases only have been recorded, this of mine making fourteen, according to his statistics.

As to the greater frequency of the bacillus in the soil of tropical countries there seems some reason for doubt, the filth of the natives probably being more of a factor than any other cause. Pedly states that it is a common cause of death among Burmese women in childbed.

If the experiments of Behring, Tezzoni and others in the preparation of an antitoxin from the serum of dogs, or rabbits for the destruction of the bacillus of tetanus are as successful as they claim, we may yet assure our mid-wifery patients of an immunity from tetanus as surely as the vaccination of their children protects them from small pox.

CASES OF ABDOMINAL SECTION.*

BY B. F. FORTNER, M. D., VINITA, IND. TER.

I am requested to report cases of abdominal section. Accordingly I select one only which is of more than ordinary interest, by reason of complications rather than of anything connected with the operation. I do not care to consume the valuable time of this society by relating plain cases of coeliotomy. I consider that the diagnosis in abdominal cases, demands far greater skill ordinarily than the subsequent operation.

This case is that of a woman aged 40, and previously healthy. I saw her August 12th, 1893. She had a distended abdomen, some pain and nausea, and a temperature of 100°. The belly was smoothe but had not the contour of ascites. The differential diagnosis was between fibro-cystic tumor only, and ascites coupled with some sort of tumor. The pelvic viscera were crowded down, and there was both constipation and dysuria. Exploration of the uterus was unsatisfactory; though its depth seemed not much beyond the normal. It was fixed and sensitive. Menstruation was less frequent and less copious than normal—a diagnostic feature of importance. She gave the history of a tumor having primarily appeared to the left of the median line in the inguinal region. I regarded her present symptoms as indicative of peritonitis. With my hypodermic syringe I drew off some liquid and subjected it to heat. It coagulated promptly. She took treatment but grew rapidly worse. Being 30 miles distant I did not see her again for a few days. When next seen her condition was extreme, on account of extensive peritonitis. Being compelled to give her breathing space I inserted a trocar just above the pubes and drew about 25 pounds of greenish colored tenacious fluid. After this it was easy to make out a large lobular feeling tumor filling the pelvis and reaching a few inches above the pubes. She improved slowly, but was nevertheless, for many months, in such condition of extreme exhaustion that radical surgery was not to be thought of. She had to be tapped on November 1st, December 10th, 26th, and

*Read before the Indian Territory Medical Association, Dec. 12th, 1894.

January 20th, 1894, after which she gained flesh and strength until May 14th, when all her symptoms grew worse, and her lower extremities become immensely œdematous, which condition extended to her thorax. Early in June and again in the latter part of the same month she had to be emptied—in all seven times, always to prevent suffocation. I began to fear that the only possible opportunity for operation, which was after May 14th, had gone. I had come to the conclusion that I was tapping the abdomen and not a cyst as I at first thought. It filled too rapidly, and the liquid seemed no longer perceptibly tenacious to the feel.

The urine contained no albumen at first, but during the last few months it was present in good quantity. On two occasions I explored the hard part of the tumor with a capillary trocar to the depth of several inches for diagnostic purposes. The tumor from the first grew rapidly, and now reached far above the umbilicus. I had determined at all hazards to operate and related the case somewhat in detail to this society at its last meeting. I was encouraged to proceed. That adhesions existed none of us doubted. None of us could be certain as to the pathological condition of the kidneys, nor as to whether the uterus itself was involved, two questions of grave importance in estimating the immediate result of so extensive an operation and so prolonged anæsthesia as seemed to confront us. What was to become of that dropsy in case the patient survived the operation? This I hoped was more due to peritonitis than to actual degeneration of kidney.

On July 10th, assisted by Drs. Bagby and Donnahoo, and an anæsthetist, I operated. She came upon the table after the usual antiseptic precautions. Her abdomen was so immensely distended that breathing was extremely difficult and that only in the sitting posture, in which position the chloroform was administered. An incision 6 inches long was made extending to the cavity in only one-half inch of its lower extent, in order that the liquid, 40 pounds in amount, might escape slowly. About twenty minutes was thus consumed in order that the lungs might slowly dilate, and the brain and heart adapt to the new order of things. In the mean time the patient was gradually lowered to the recumbent position. The incision was then carried into the cavity full length, and the hand introduced. Finding that the tumor could not be reduced materially by aspiration, this cut was carried upward, making fourteen inches and passing by the umbilicus. The immense tumor weighing eleven pounds was with some difficulty brought through this opening, and the work of discovering and tying off adhesions, which were most numerous posteriorly, and breaking down others, went on as rapidly as possible. *Not a single adhesion had occurred at the site of either of the seven aspiration punctures*, which were arranged in the median line one above another purposely. My assistants were careful to keep the intestines inside the abdomen with as little handling as possible, using an "elephant ear" wrung from warm sterilized water. The larger tumor proved to be a fibro-cystic degeneration of the left ovary, the solid portion of which predominated as 5 to 7. It was lobular anteriorly but posteriorly fitted the sacral concavity. The Fallopian tube and broad ligament arched across the front lower surface of the growth, only its fimbriated extremity

free. This same condition of parts existed also on the right side, where the right ovary was in a like condition except that the cystic portion predominated and the whole growth weighed not more than one pound. The left tumor had monopolized the space of the pedicle and crowded the right into a corner. The curtain like broad ligament when separated threatened to ooze too much, so that a chain stitch line of ligature was carried from a point below the fimbriae inwards to the pedicle proper, which was at the horn of the uterus. This was so bulky that I seized it with a strong pedicle forceps and squeezed it with great force so as to trench it. Midway in this trench the double ligature of silk was made to transfix the pedicle and was tied in the usual way with great tension, in spite of which after the pedicle was cut the ovarian—now the large nutrient artery—spurred. This was caught up and tied as in an ordinary amputation, completely controlling all hæmorrhage. Like treatment was given the right except that no supplementary ligatures were needed. The uterus was almost normal—only slightly deepened. My failure to satisfactorily explore it had been due to a lateral version or flexion. No ventro fixation was deemed necessary.

The parietal peritoneum was red and greatly increased in thickness—chronically inflamed. Our manner of closing the wound was not the conventional. Through and through silk sutures were preceded by continuous peritoneal cat-gut. The sewing of the peritoneum was kept half an inch in advance of the deep suture in order that the index finger in the abdomen might protect the viscera and guide the needle point. This was easy enough in so long a wound and so lax walls. The laxness and œdema of the parts incised made me desire to seal the peritoneum independently, and for fear of stitch abscess in such doubtful tissues I could not afford other buried sutures. Once recently I stitched up the abdomen in three layers as I had often done before and got stitch abscess in the middle layer, which gave me no end of anxiety and somewhat weakened my faith in both the purity of so-called aseptic cat-gut and in the method. A glass drainage, aristol, gauze and cotton, completed the dressing. The woman rallied in good season and moved out nicely. Within twelve hours she had reached and slightly exceeded her accustomed temperature which had for months been rarely less than 100°.

I am aware that while to some of the profession there may be something of interest in this operation; the chief interest lies in other directions. My hearers may have followed me with a degree of interest because of the questions of diagnosis, the extremely long incision required, the great length of time allowed for the liquid to escape, the infiltrated condition of the field of operation, the extensive and varied kind of ligature necessary, and finally the manner of controlling the artery of the pedicle, all of which are somewhat unique. But what was to become of the peritonitis and abdominal accumulation even in case the surgery proved satisfactory? You will remember that the liquid had been accumulating at a rapid rate—3 to 5 pints per day. What besides our drainage tube was to prevent a distension and reopening of the abdomen? Was all this peritonitis, and albuminuria and œdema attributable to pressure? Twelve hours after the operation the abdomen was

perceptibly filling. The liquid was flowing upward through the tube and saturating the dressing. But now an important change comes about. The great œdematous limbs, dry for months, have reduced nearly one-half and are beginning to perspire. This increased until it trickled down and wet the bed linen. Diuresis came on, the urine flowing in great quantities. Of course the problem was thus solved. After the third day the tube was dry and we removed it, substituting a stitch, under cocaine. The temperature gradually declined, abdomen shrank, appetite become almost insatiable and the patient went on to perfect recovery. She returned home to her household duties and I hear that she has been in perfect health for months. The aggregate weight of liquid and tumor in this case was 51 pounds, equal to five good sized babies.

Anæsthesia was most carefully induced, pre-aspiration not being deemed safer.

SOME OBSERVATION IN CLOSING ABDOMINAL WOUNDS.*

BY H. RAGEN, M. D., KANSAS CITY, MO.

Gentlemen :—In writing on a subject so important and broad as the one I have chosen, it is evident that it will be impossible to cover the subject as closely as it should be, as many pages could be written and then not enough be said. I shall talk only upon the essential points and aim to make my paper cover the more important parts. Before starting, however, I wish to thank my friend, Dr. J. H. VanEman, of this city, for the many opportunities and the privileges that he has given me, also for his assistance and advice in practice.

Before starting on the subject of closing this wound which we will say is into the peritoneal cavity,—this great serous sac that our professors of anatomy used to say was *serious* as well,—let us consider what nature does to assist us. Suppose we are called and find a smoothe or torn ragged wound of the abdomen, what do we find? Pain, hæmorrhage and, if a few hours after received, all the vascular phenomena of inflammation, the edges are thickened and nature is making an effort to repair by throwing out an organic cement or coagulated plasma; then it is our duty to assist nature in the work of restoration. Now as to healing, only one condition should be considered and that is union by first intention. Authors disagree as to the healing by immediate union, and Billroth says that it does not take place, that healing takes place by first intention, and we have three grades of union, first, by organic cement, coagulated plasma, second, provisional union by cellular neoplasm and lastly by cicatrization, by filamentary connective tissue. Then it remains for us to use every precaution as to cleanliness, to secure perfect coaptation, to prevent infection, provide drainage and to guard against hernia.

I have formed some conclusions in the matter of closing these wounds that whether right or wrong have been honestly formed, and like the use of some of our reliable drugs I shall use and advocate the method until some thing better is offered. In closing a wound for any laparotomy where there has been no pus or infection, I am always in favor of closing the peritoneum

*Read before The Twin City Medical Society, March 4, 1895.

separate from the tissue, first, to prevent infection, second to secure union by first intention, third to prevent hernia; the skin and muscular tissue may be closed either together or separately.

However the method I favor above all others is this: raise the peritoneum with two long tenacula and with a full curved Hagedorn needle and aseptic cat-gut close it firmly with a continuous suture. If pus is present or you suspicion infection leave an opening at the lower angle of the wound. Next the muscular tissue is closed the same way and lastly the external wound is closed. For this I believe it is best to use silk worm gut, and with a needle modeled by Dr. VanEman, which resembles the Hagedorn yet has no cutting edge. Here let me say a word in regard to this needle; in introducing it the needle holes are made at right angles to the wound so that when the sutures are drawn up tight the needle holes are closed instead of being drawn open, as with the Ashton or other needles; in closing the external wound the needle is pushed through and threaded and withdrawn and the wound closed with deep interrupted sutures. I favor this operation especially if there is pus present or a traumatic wound is to be dealt with for several reasons, first, that if pus is present you lessen the danger of suppurative peritonitis, second, you are sealing each tissue separately, giving good strong support to the abdominal wall, and lastly it lessens the danger of stitch abscess following the operation.*

In experimental work on animals I have found that I get a quicker union, a finer cicatrix and I believe a better result from the method, and above everything else I favor closing the peritoneum separately always. Now a word about drainage, and I shall close, I do not believe in drainage if the wound is clean, but if suspicious of infection or if pus is present, drain freely by all means.

TRAUMATIC INJURIES OF THE EYES.†

BY H. MOULTON, M. D., FORT SMITH, ARK.

In these philanthropic days of preventive medicine, diseases of the eye have received their due share of attention. But we hear less of the prevention of injuries. These in reality can be more often guarded against than diseases, for they have more tangible causes and can be more readily foreseen. For instance a man who enters upon a certain occupation, knows before hand that all who engage in the same occupation have had or are liable to have injuries happen to their eyes as a result of pursuing such occupation. Grinders of tools represent such a class, who almost universally suffer from the accident of foreign particles flying from the wheel into the eyes. These particles, in dry grinding at least, are hot and according to the the portion of cornea struck and the depth to which they penetrate, do more or less damage to sight. Now all these injuries can surely be prevented by the simple plan of wearing plain protective spectacles of glass or mica. So of many other occupations.

Mr. Simeon Snell, of Sheffield, Eng., read a paper before the last British

*Two interesting cases illustrating the benefits of this mode of treatment were reported to the Society. One a case of appendicitis and one of lacerated wound of abdomen.

†Read before the Indian Territory Medical Association, Wagoner, I. T., Dec. 11th and 12th, 1896.

Medical Association, on the relationship of "Occupation to Eyesight" in which he dealt very fully with the relative liability of certain trades or callings, to produce injury of the eye sight. With us who practice in the Indian Territory, many of these causes are yet of no concern: for example, the exposure of the eyes to the intense light of electrical welding, where the ultra-violet or chemical rays set up a severe inflammation of the conjunctiva with swelling of the lids and involvement of the cornea, and other structures. But there are two occupations at least which concern us and are among the most fruitful sources of eye injury. One is that of grinding, which is connected with every saw mill in the territory. The other is that of coal-mining. The first has been already mentioned, and I am sure you as well as I, can all testify to many an injury derived from that source. So, also, I need offer no illustration from the colliers. This latter class suffer I believe less frequently than the former, but the injury is apt to be more serious. The particle of coal or piece of steel from the pick or drill is larger and flies with more force and more often penetrates the tunics of the eye, whereas the particles from the grinders wheel seldom perforate. Snell seconds the motion of Fuch's, that the wearing of protective glasses among such workmen should be made compulsory, and Magnus would prohibit the "employment of one-eyed men in occupations dangerous to eye sight." The great obstacle in the way of the glasses is the objection of the men themselves to wearing them when at work. There are objections I admit, but the obvious advantages are so great and the experience of those who have tried them so favorable that I think we should at least bring the matter to the attention of those of our clients who follow these occupations.

Many of the more serious accidents occur without reference to occupation. Such is the case with scissors in the hand of the child, the stick of kindling-wood under the axe of the careless boy, or a stray bird shot from the muzzle of a thoughtless companion's gun. Against these we can take no systematic precautions. Yet I am told that in England some sportsmen habitually wear, when hunting, heavy protectives of crystal a quarter of an inch thick, set in steel frames fitting closely to the margins of the orbit. They are absolutely shot proof. I think this speaks better perhaps for John Bull's caution than for his markmanship.

I wish to emphasize the importance of the lighter injuries, for I believe we sometimes fail to do our duty by them in not considering what may follow them.

To illustrate from my own practice: On August 3rd, 1893, one of these grinders of tools, working in one of the furniture factories of Fort Smith, received at the same time in each eye several fine particles from his wheel, which did apparently but slight damage to the cornea. Yet on the 5th of August a double iritis developed, which ran a severe course, but with an ultimate good recovery. The iritis was clearly induced by the traumatism, there being no other cause constitutional or local to account for it. Neither mercury nor potash were employed in its treatment.

When the grave responsibility of deciding what to do with an eye which

has recently suffered a perforating injury confronts us, we are confused sometimes with contradictory testimony from the clinical histories of other cases. Eyes which have been thought safe, have at last been the cause of sympathetic blindness of the fellow eye. So too, many an experienced ophthalmic surgeon has advised enucleation, which has been declined, of eyes which afterwards have remained harmless for a life-time. Experience is a great teacher, but has not yet taught us everything. Of course in cases where sight is destroyed and the mutilation is great, or where the wound is in the ciliary region complicated with traumatic cataract, or where the eye contains a large foreign body which cannot be extracted, a decision is easy. In most other cases there is a growing tendency to ask the question, "cannot the eye be saved, if not with sight, at least with a good appearance?" Even with the severe cases too it is proposed, as will be seen later on, to sometimes save the eye ball by a resection of the optic nerve. Since the general acceptance of the theory of the infectious origin of sympathetic ophthalmitis, this question of infection is usually the most important one in which a decision rests. We will consider some of the plans of treatment, of which this theory, established by Deutchman, is a basis. In the first place an accurate investigation of the nature of the injury is necessary to enable us to decide whether the injured eye is likely to become the seat of an infectious inflammation. Is there a perforation? What structures are injured and how extensively? What produced the injury? Does the eye contain a foreign body? If so, what is it? The most difficult of these questions is the determination of the presence or absence of a foreign body. It is most important too, for the body is liable to carry with it the infection which we dread. Something may depend on its composition. For example, glass is apt to be aseptic. Iron is the opposite. Fuchs speaks of the dangerous nature of coffee and brass. But at the Eighth International Ophthalmological Congress we had the testimony of such excellent authority as Leber, Knapp, Noyes, Roosa, Kiff and Meyer, that foreign bodies of brass and coffee were apt to be aseptic and hence if small likely to be tolerated. The difficulty of determining the presence of a foreign body is enhanced often by its peculiar location, by the presence of blood in the aqueous or vitreous, by traumatic cataract, etc. To illustrate the doubts that often attend this question, I record the following:

A gentleman in turning a corner in the face of a wind, which was almost a hurricane was struck with force by some small object, in his right eye. The eye felt as though it had sand in it for a day or two, but afterwards was all right for a week or more. Then it began to inflame and become sensitive to light. When I saw him seventeen days after the injury I found iritis and over the upper temporal quadrant of the periphery of the iris a deposit of lymph, millet seed in size, and apparently enclosing a small foreign body. There was no mark on the cornea to indicate its point of entrance, which I supposed to be in the limbus and thus invisible. Atropia was instilled and I expected as soon as the inflammation subsided to perform iridectomy and remove with the piece of iris the foreign body. Much to my surprise the flake of lymph and the supposed foreign body gradually but quickly disappeared, and the patient

was considered well after a three weeks continuance of the atropia. Several weeks later, however, he had a relapse, and this time was under the care of an able oculist in a distant city. This oculist, so he writes me, found a flake of lymph on the base of the iris at its inferior nasal quadrant. From the history and not knowing the location of the previous nodule he supposed there was a foreign body, probably glass, imbedded in the iris at the seat of the nodule. He, too, expected to operate after the subsidence of inflammation, and he too was disappointed in the same way as I had been. The case was afterward cleared up by a permanent and perfect recovery under antisyphilitic treatment. Had it not been for the history, the appearances alone would have led either of us to diagnose specific iritis in the first place

As a general rule in almost every instance an eye containing a foreign body that cannot be extracted by operation as with the magnet or otherwise, must be sacrificed. While a small substance may remain in the background harmless for a lifetime, yet Knapp in the *Archives of Ophthalmology*, Vol. XXIII, p. 174, after relating some cases, says concisely: "These cases show again that foreign bodies in the back ground of the eye though apparently tolerated, can never be trusted."

We next approach the point of the prevention of infection of the injured eye. To accomplish this we use every possible care in cleansing the wound and treating it antiseptically, and keeping its edges closed by suture if practicable. We observe at the same time the rules of treatment demanded by a wounded lens, prolapsed iris, etc., if any of these conditions be present. In the *Ophthalmic Record*, for April 1894, Dr. P. D. Keyser, of Philadelphia, reports two cases of injury to the ciliary body treated successfully in this way. I have had some successful experiences myself. As it is said that sympathetic trouble never develops in less than two weeks from the time of injury we have this secure period in which to try our conservatism. We will in this way save some eyes which otherwise might be lost.

DeWecker and others in accordance with the theory that the infectious material finds its sole path of transmission to the other eye, in the optic nerve seek to obliterate this path by resection of the nerve. In this way they have waged what they call a "campaign against the abuse of enucleation." Yet numerous failures of the method tried under favorable circumstances, have been reported by Rohnur, Marschal, Krones, Schweign, and others, both abroad and in this country. (See article by Rohnur translated by Webster Fox in the *Ophthalmic Record*, Vol. II, No. 7.) There must be some other path of transmission than by the optic nerve. At any rate we have only a cosmetic argument left, offset by a possibility of failure or a long painful recovery on the side of resection. Whereas on the side of the radical operation we have the prospect of an almost certain success, a quick recovery, and a permanent removal forever of the source of infection. In this light who of us would not prefer enucleation in a case demanding either.

Thus we see that while we may be justified in trying to save a larger number of injured eyes than formerly, the field of conservative treatment has not actually yet been very much enlarged. Doubtful cases in which conservatism

is tried, must be selected with care and kept under control for a long time. The patients must be warned, especially in cases of foreign bodies, that they are forever in danger.

We may be able to reduce the number of enucleations. But if we wish to sleep soundly at night and feel that we have done our whole duty, we will have to continue to remove some injured eyeballs for a long time to come.

HALLIWELL BUILDING.

SOCIETY PROCEEDINGS.

JACKSON COUNTY MEDICAL SOCIETY.

DR. H. C. CROWELL, Pres't.

DR. J. T. MITCHELL, Sec'y.

Hall, No. 916 Walnut Street.

The Jackson County Medical Society met in regular bi-monthly session, March 28th, 1895, and was called to order by the president, Dr. H. C. Crowell. After routine business was dispatched, Dr. J. A. Horrigan read a paper on "Fatty Degeneration of the Placenta." This paper had the merit of being based on personal observations, and was accompanied by a chart giving data, etc., in detail. The paper was further discussed by Drs. Dannaker, Porter, Jno. Wilson, Cordier, Pearse, Block, Bellows and Wainright. At close of this discussion, Dr. I. J. Wolf read a scientific and well prepared paper on "Mixed Infection in Zymotic Diseases; The Antitoxin Treatment." This was discussed by Drs. Waring, Jno. Wilson, Block and Hal Foster. Some reference was made to action of City Board of Health which injected some warmth into the discussion, but after mutual explanations, satisfactory statements were made by all parties. After some miscellaneous business, society adjourned.

The next regular session occurred April 10th. The paper of the evening was furnished by Dr. George Mosher, who chose for his subject "Tetanus Puerpalis," (see page 152). In the discussion which followed a number of cases of tetanus were reported, in which various treatments had been pursued; the majority of the cases proved fatal; several recoveries, however, were reported, Dr. Trueheart in particular having been affected by tetanus in early life, and having perfectly recovered. None of the gentlemen present had met with tetanus in the puerperal woman and the rarity of the disease intensified the interest in the discussion. The consensus of opinion endorsed the position of the author of the paper that the disease was caused by entrance of bacteria through a wounded surface and also that the treatment must be mainly prophylactic.

In closing Dr. Mosher called attention to the gratifying results in maternity hospitals since introduction of aseptic methods, and suggested a lesson from that for the practitioner in private work.

The meeting of April 26th, was devoted to the discussion of two papers, one by Dr. Robert T. Sloan, upon the subject of "Pelvic Pains, Independent of Organic Diseases," and the other by Dr. W. S. Wheeler, subject, "Pleurisy and its Treatment." Dr. Sloan's paper appears upon page 149 of this number.

The discussion was opened by Dr. J. Block, he spoke of the many phases of rheumatism and gout, mentioning in particular cases of pelvic pains, cases of sore throat, and of intestinal pain that resist ordinary means of treatment but would yield to treatment directed against the formation of uric acid and calculated

to assist in its removal from the system. "It seems to be one of the misfortunes of specialism in modern medicine that the doctor looks too closely at the particular local defect, and does not consider with sufficient care the condition of the entire economy." In many of these cases of obscure pain, relief was obtained by the exhibition of anti-rheumatic medicine combined with tonics and proper hygiene.

Dr. Dannaker favored the administration in these cases of pure nitric acid in large doses plentifully diluted. For the pelvic pains, he had returned to the old method of rest in bed, and the relief of the engorgement by douches of hot water.

Dr. Schaffler perfectly agreed with the essayist as to gouty conditions being the causes of many simulated diseases. He had not considered the salicylates as effective in these obscure cases as they were in acute rheumatism. He had had no experience with the nitric acid treatment, but favored the use of alkalies.

Dr. Lester Hall thought that these obscure manifestations were more frequent now than in former years; in his opinion there seemed to be some connection between this condition and la grippe. Referring to other cases occurring at the menopause, in which the pain was caused by uterine atrophy and nerve pressure, he said they could be cured by dilatation and stimulating applications.

The paper was further discussed by Drs. Ayres, Hardin, Sharp, Bogie, Pearse and Wolf. The consensus of opinion being that the diet of these cases should be cared for appropriately, anti-rheumatic medicine given, and above all plenty of exercise combined with the free drinking of water.

Dr. Riley mentioned the fact that frequently after prolonged disease, the patient becomes rheumatic or effected by some of the obscure manifestations of the uric acid diathesis, and in such cases he had been accustomed to give large quantities of water, exercise suitable to the condition of the patient, and as a medicine to administer Litiated Hydrangea, the action of which he had found always beneficial. The discussion was closed by Dr. Sloan.

COMMUNICATIONS.

My Dear Doctor :

The most notable thing observed by the western man when he becomes settled in New York is the ignorance of New Yorkers pertaining to things which are western. One of the first things noticed by me was to be dubbed a Kansan, when I made the announcement of my home being in the wonder of the west, Kansas City. The people here hardly realize there is such a place. They have heard of Chicago, I presume on account of there having been such a thing as the World's Fair. If it had not been for this great advertising scheme on the part of Chicago, the ignorance of these New Yorkers pertaining to things western would be simply incomprehensible. This has caused the New York medical man to become wrapped in the cloak of egotism and he endeavors to do the thinking for the whole of America. 'Tis true his advantages are superior to other men, causing many of them to become brilliant in their special line of work, yet I do not see why many of them should make every body else feel their inferiority. I have attended the meetings of the New York Academy of Medicine, which are conducted on similar lines to that of our own, except that they frequently have short papers by several men on the same subject; then follows the discussion, but the welcome extended to strangers which is so freely given in our societies is lacking. The Post-Graduates are invited to these meetings and are then as completely ignored as if they were in the heart of Africa.

I brought with me letters of introduction to the men engaged in the special

line of work which I am studying, viz.: Drs. Emmett Holt and Siebert. Upon reading these letters both gave me special invitations to be present at their hospital work and I think I shall be well pleased.

I heard Landon Carter Gray talk upon a mooted point between neurologists and gynecologists as to operations upon the female genitalia for the relief of mental conditions. He emphatically condemns such operations, claiming that their benefit is absolutely nil, except only temporarily from the mental impression. When it comes to the education of the masses Gray believes that our patients should never understand the drugs they are using. He therefore selects his own apothecary in whom he can trust and therefore regulates the administration of his remedies. This newspaper publication of diseases and remedies, he thinks is worth just about the price of the newspaper, viz: two cents. I am afraid he and Punton conflict in their theories concerning the education of the masses.

I have heard Wyeth, and I must say that surgery as well as medicine is having injected into it more common sense daily. It has been known for years that advertising cancer specialist have been making remarkable cures in superficial neoplasms by simply applying their pastes for the purpose of destroying diseased tissue, and many remarkable cures have resulted. Now Wyeth says that by the use of "Marsden's Paste," you can destroy diseased tissue, it will penetrate deeply, the arsenious acid possessing this power.

The paste consists of the following formula which may be used in true strength.

MARSDEN'S PASTE.

R	Arsenious acid.....	ʒi—ʒii
	Gum acaciæ.....	ʒi—ʒi
	Mur. Cocaine.....	grs. 12—grs. 18.

You add water in sufficient quantity to make a thick paste and then apply from 18 to 36 hours. Upon Wyeth's authority very little pain accompanies the caustic action of this remedy, and it will thoroughly destroy these superficial neoplasms. If the arsenious acid is successful then why not resort to it and rob the quack of one of his chief implements of trade.

I attended one of the clinics yesterday given by an orthopaedic surgeon and if I lived here in the place of Kansas City I should certainly report him to the humane officer, and have him arrested for cruelty. A ten months old babe was placed upon the operating table and after taking a few whiffs of sulph. ether its screams were smothered by the inhaler, while forcible twisting of the tendons of the foot was made with an instrument made like a monkey wrench. The foot was then put up in plaster of paris. The primary anaesthesia, so-called by the doctor was a veritable humbug, the child not having received enough to produce any anaesthetic effect. This same operator made a tenotomy in a little girl 6 years of age—severing the tendo achilles, and then made forcible flexion of the foot, putting it up in plaster of paris, without any anaesthesia.

I saw one surgeon make a laparotomy, and like many of our Kansas City surgeons, form his diagnosis after the tumor had been removed and laid open with the scalpel. Physicians living in the West need not send their surgical cases any further east than Kansas City, as our men are fully up to the times, and can do just as brilliant operations as are performed here.

While surgery requires considerable technique, on the other hand in medicine simplicity is becoming the rule, when such men as Siebert states that his armamentarium consists of not more than twenty-five different medicines, it is indeed a favorable indication that the medical profession are recognizing something else other than drugs in the treatment of disease. But why continue? This letter is already long, and I must bring it to a close by saying

that Drs. Langsdale and Gaines are improving their opportunities. Langsdale in particular is storing his mind with experience, which will enliven the Academy, the home and the fireside of his friends when he returns. He has found by experience that there are no alleys in New York.

Yours fraternally,

New York, April 16, 1895.

JOHN W. KYGER, M. D.

RESOLUTIONS OF RESPECT.

WHEREAS; Dr. Chett McDonald has filled the office of President of this Association, faithfully for one year, thereby attaching himself to us in a strong way, not only as our leader, but as a professional gentleman; and, whereas his brother Dr. Park L. McDonald, has recently become a member of our Association, thereby connecting himself with us in a union to promote our knowledge and application of medicine, and

WHEREAS; The Almighty, in His supreme wisdom, has chosen this hour to remove from them, their mother, Mrs. C. D. McDonald, in a very sudden and unexpected manner, thereby bereaving them of their lifelong and most honored friend, be it,

Resolved; That we, the undersigned committee, by order, and in behalf of the Twin City Medical Association, extend to our brethren, Drs. Chett and Park L. McDonald, our most hearty sympathy, for them in their affliction, and the highest degree of consolation in this their hour of grief. And be it further,

Resolved; That a copy of these resolutions be sent to each of our brethren, and that a copy be spread upon the minutes of this Association, and that a copy be sent to the editor of the MEDICAL INDEX of this city, for publication.

Respectfully,

Signed, L. B. SAWYER,

T. B. THRUSH,

B. L. CHAMBLISS,

} Committee.

WHITE'S OPERATION.

The following letter will appear in an early number of the *Philadelphia Medical News*. The profession are accepting White's operation for enlarged prostate as finally proved. This letter, however, is called forth by some adverse criticism, and speaks for itself.

To the Editor of *The Medical News*:

SIR:—Dr. Belfield, in the *Journal of the American Medical Association*, for March 9, 1895, and Dr. Bangs, in the *Medical Record* for April 6, 1895, published under the heading "Warning against Castration for Prostatic Enlargement," communications which, while they express some views with which I am in entire accord, contain, on the other hand, statements that hardly seem justified by the facts now before the profession.

No one could deprecate more than I the indiscriminate performance of the operation. I suggested it with great caution, laying before the American Surgical Association the line of thought and the experimental work that seemed to me to give the idea scientific standing. More recently I wrote (*British Medical Journal*), January 5, 1895; *Medical News*, December 22, 1894), that while the evidence then existing obviously and amply justified the original suggestion, I desired to call attention to the fact that I had not made it without hesitation. I added that, "having observed with disapprobation the indiscriminating assaults of some extremists upon the urethra, the tubes and the

ovaries, and more recently upon the appendix, I did not want to be responsible for a similar attack upon the testicles," and that I knew that "the step from experiment to operation is and should be a long one, and felt the responsibility involved in proposing a new operation, and especially one of this character—easy of performance, with a low mortality, and intended for the relief of a condition of enormous frequency."

I am still most desirous of having the operation confined within its proper limits, and to this extent am in sympathy with the gentlemen mentioned.

But when Dr. Belfield says that while it is admitted that "castration may cause atrophy of glands, subsidence of edema, and relief of distress, but that it will not reduce the hypertrophied connective tissue is *a priori* probable;" and Dr. Bangs writes that "a theoretical operation, based upon observations upon dogs and eunuchs, in whom physiological atrophy of the prostate is said to be induced by the abrogation of its sexual function, cannot reasonably be applied with the expectation of getting the same results in elderly men in whose prostates hyperplasia has already taken place," and reiterates that the operation "is based on theory alone," they seem to me to ignore existing and conclusive evidence. This is now complete in every particular as regards the effect of bilateral castration on the majority of hypertrophied prostates. The experimental and theoretic stage has long since been passed. I have in my possession sections of a prostate taken from a patient that died after, but not because of, the operation, which show clearly that it *does* reduce the entire gland, and that the hypertrophied connective tissue shrinks and dwindles after the earlier disappearance of the glandular elements. But that this assertion may not rest on my statement I would quote Mr. Joseph Griffith, F. R. C. S., Hunterian Professor of Surgery and Pathology in the Royal College of Surgeons, England, who has recently reported on the condition of an enlarged prostate eighteen days after double castration. He describes in details and figures (*British Medical Journal*, March 16, 1895), the changes which had taken place, summing up as follows: "In short, the cell elements first proliferate, and ultimately disappear, leaving a comparatively small amount of fibrous connective tissue in their place. * * * The gland, whether enlarged or normal; undergoes certain degenerative changes after removal of the testicles which lead to its conversion into a small, tough and fibrous mass in which there are only remains of the glandular tubules and ducts."

As to the clinical evidence Dr. Bangs urges that, to test the results of the operation, "the size of the prostate should be determined by three examiners, and the examinations repeated with sufficient frequency to determine positively the size of the organ." These conditions, which are somewhat rigid, have been complied with in all my own cases, in one of which the estimated shrinkage of the size of the prostate from that of a small orange to that of a walnut took place in a week. A half-dozen examiners confirmed this, and several hundred medical students saw the patient and learned directly from him of the concomitant and remarkable improvement in his symptoms. Dr. Lillenthal, of New York, two weeks after the publication of Dr. Bangs' letter published the report of a case (*The Medical Record*, April 20th, 1895), which so completely answers all Dr. Bangs' theoretic objections as to be conclusive in itself. I may add, however, that I have now notes of similar cases to the number of nearly one hundred, in most of which all previous palliative treatment had failed, and in which the results have been equally striking. It seems to me too late to say, as Dr. Bangs does, that the relief appearing within a few hours has been too positive to be attributed to the operation itself, because "it hardly seems rational to believe that a hyperplastic organ in which, no doubt, there has been an increase of the connective-tissue element, should diminish in size within a few hours after castration has been performed." The facts are

against him. The hyperplastic organs do diminish in size, and often in an almost incredibly short space of time.

Both the gentlemen who have been moved to warn the profession emphasize the possibility of mistake in diagnosis, Dr. Belfield going so far as to say that "whenever a case of real or supposed prostatic enlargement demands operative relief this should always be an incision into the bladder." I am quite willing to admit that there must be some doubtful cases, and that in these and in a certain proportion in which the diagnosis is certain a cystotomy will often be desirable. But it is assuming altogether too much to claim that this is "always" proper. I have not found the great majority of cases of prostatic hypertrophy difficult of recognition nor of classification by combined rectal and instrumental exploration. But if I may be thought to be mistaken as to this and other similar questions raised by these gentlemen, it is hardly likely that Fenwick and Moullin and Griffiths in England, Bereskin in Russia, Hefnerich and Meyer and Hænel in Germany, Ramm in Norway, Watson and Warren in Boston, Halstead and Finney in Baltimore, McBurney and Stimson and Pilcher in New York, Andrews in Chicago, Souchon in New Orleans, Walker in Detroit, Haynes in Los Angeles, and dozens of other surgeons of more or less prominence have been wrong as to their diagnosis, or in saying that previous palliative treatment has failed, or unreliable in their descriptions of the rapid and sometimes astounding shrinking of the gland and disappearance of the subjective symptoms, even including long-standing cystitis. They are all now on record to this general effect at any rate.

Dr. Belfield alludes to a case in which a patient with a large prostate, "evidently inflammatory," and severe cystitis, was found by a suprapubic incision, to have a small calculus, previously undetected. He adds: "Prolonged vesical drainage was followed by great reduction of the prostatic enlargement and by a symptomatic cure." He then imagines with apparent horror the status—professional and legal—of the surgeon, who might have done castration, when the calculus was subsequently discovered. This sort of argument appears to me to be misleading, as it lacks necessary detail. The age of the patient, indicating the value of the testicles from a sexual standpoint; the relation of the calculus to the enlargement of the prostate—i. e., whether cause, which would be rare, or effect, which would be common; the period indicated by the word "prolonged;" the presence or absence of a urinary fistula; and the exact condition called a "symptomatic cure," should all be known before any such comparison could be drawn. I mention the case because in a gentleman, aged seventy-six years, with a large prostatic hypertrophy and a secondary calculus, which had formed after a previous litholapaxy, and which lay in a deep post-prostatic pouch, I have within the last month deliberately performed castration as a primary operation. Two weeks later, the prostate having shrunk to one-sixth its former bulk, the residual urine having disappeared, and the cystitis (in spite of the presence of the calculus) having almost vanished, I crushed and evacuated the stone. The patient was sent to me by Dr. Schum, of Huntingdon. He went home free from all symptoms.

Dr. Belfield says, finally, that "the claim that double castration is safer than drainage, is not, in his experience, warranted, if drainage be made either by perineal urethrotomy or suprapubic incision in *deux temps*; the danger in cases that really demand operative interference is the anæsthetic, not the knife." But drainage in most cases is only a palliative measure, and, if permanent, is a source of more or less continued danger and of great discomfort to the patient. Dr. Belfield has very properly described it under the head of "Palliative Operations" in an article that he has published elsewhere. It is not fair, therefore, to compare it at all with a measure that in properly selected cases is curative, and which thus challenges comparison with the various

forms of prostatectomy. He might almost as well have written of the mortality of catheterism, which also gives great relief in some cases. As to the anæsthesia, as double castration can easily be performed within three minutes, it seems unlikely that any serious objection to the operation will prevail on that account. I have on several occasions completed it in a little less than three minutes before the class at the University of Pennsylvania, and without undue haste. In regard to the general question of mortality, however, I may be pardoned for quoting from a personal letter from Sir Joseph Lister, who writes me: "I am glad to see from the cases that have been published that your remedy has proved so effectual in this most distressing class of patients. If I have any fault to find with you in speaking of the advantages of your procedure, it is that you seem to me to underrate them when you say that castration is an operation of little danger. You might, I think, have truly said that if it is performed with sufficient antiseptic precautions it is entirely free from danger. The *rapidity* of the relief afforded seems to me as remarkable as it is satisfactory. Allow me to congratulate you cordially on this valuable addition to our art."

My personal and professional regard for the gentlemen who have criticised the operation, and my knowledge of their sincerity of purpose, have led me to reply at such length; but I also have been actuated by a desire to have both its merits and demerits kept fairly before the profession. There is much yet to be determined in regard to it, especially as to the selection of suitable cases and as to its remote effects; but I think I may fairly claim that the existing evidence—experimental, pathologic, and clinical—removes it from the region of theory and speculation, and demonstrates its applicability to a large proportion of cases of hypertrophy of the prostate.

Dr. Bangs' statement that "if this theory could be proven, about one man in three, after the age of fifty, ought to submit to castration in order to prevent enlargement of his prostate," is an extension of the operative field which must be regarded as peculiarly his own. I have as yet not considered the subject from the standpoint of early prophylaxis. As the theory is proved, it would be interesting to know how Dr. Bangs proposes to select his cases.

Very respectfully,

J. WILLIAM WHITE.

1810 S. RITTENHOUSE SQUARE., PHILADELPHIA.

EDITORIAL.

DR. WILLIAM T. G. MORTON.

In the State House at Boston is to be a roll of honor. It is to be in the dome of the new chamber. Upon it are to be inscribed the names of fifty-three eminent men—men whose names stand as monuments to the events achieved in their times. Three of them are to be doctors, but only one on account of his service to his profession and through his profession to the world and all posterity. That name will be WILLIAM T. G. MORTON, who was the ultimate discoverer of anæsthesia by ether. This discovery needs no comment. Its value is so priceless, its benefits so far beyond computation that the man by whom it comes should be honored by high distinction; and after many years of struggle to establish this fact—apparent to every one but those who wished not to believe it—it is gratifying to know that this will be done.

"ONE WORD FOR OURSELVES AND ONE FOR YOU."

During the five months of 1895 thus far passed, the readers of the INDEX have been presented with twenty-seven original articles, of these three have been written by contributors from Philadelphia, one from New York, two from St. Louis, thirteen from Kansas City, two from Oklahoma, one from Indiana, three from Indian Territory, one from Texas, one from Arkansas, and one from Illinois. Few Western medical journals can make so good a showing. In addition to these, there have been many communications of minor note by contributors and by the editor. The INDEX is in the front rank—where it belongs—and we ask the patronage of western medical men feeling that we are giving them full return for the two dollars paid for subscription.

OUR MEDICAL OFFICERS.

We present to our readers this month the photographs of two well known Kansas City doctors, who in their official capacity have an interest in the welfare of the entire southwest, for, as Kansas City lies at the gateway of travel, epidemics must be met and controlled here.



DR. GEO. O. COFFIN.

Dr. Geo. O. Coffin, the new City Physician has been house surgeon of the City Hospital during the past year. It is due largely to Dr. Coffin's efforts

that the new hospital building is at present assured. He has worked for it with a will and knows how to work for such things. Dr. Coffin graduated at Penn University, Philadelphia, in 1879 and afterward from the Kansas City Medical College. He is now thirty-seven years of age and has been in practice in Kansas City eight years. The INDEX has had occasion to refer to the excellent surgical and medical work done at the City Hospital last year and it is a fitting comment upon the good work of Dr. Coffin as house surgeon that the Mayor so promptly chose him for the higher office. Dr. Coffin is a man of undoubted executive ability; he studies men and methods as well as medicine and under his leadership our present hospital system will be made better. Dr. Coffin is a member of the local and state societies.



DR. NEWTON McVEY.

Dr. Newton McVey, the present house surgeon, who takes Dr. Coffin's place at the hospital is in his fiftieth year, though few who know him suppose him to be over forty. He is a native of Indiana, graduating at Indianapolis in 1875. He practiced at Alma, Wisconsin, for 14 years and was president of the Wabasha County Medical Society and a member of the Wisconsin and Minnesota State Societies. He was a private student under Dr. Senn, at Milwaukee, in 1888, having also received post-graduate training at Rush in 1883.

He has resided in Kansas City for six years and lately has been pathologist at St. Joseph's Hospital. He is one of the ablest diagnosticians in the west, but of that reticent nature that avoids publicity in his good work. He is "a member of Veteran Company A—God bless 'er" Was a member of Co. C. 132nd regiment, Indiana volunteers and afterward served in Co. A, 47th regiment, Indiana volunteers to the close of the war. He is a member of the local societies at Kansas City.

The INDEX wishes to compliment the Mayor on his good appointments, and the profession on its representation.

EDITORIAL NOTES.

A MAP OF THE WORLD FREE.—The Rio Chemical Co., has mailed to every physician in the United States, Canada and Europe, a complete map of the world corrected up to date.

Any of our readers who have not received one can do so by writing to the above firm, and giving their correct postoffice address.

TO RELIEVE DYSURIA OF GONORRHOEA.—The following has given brilliant results to the author.

R	Sodii salicylate.....	℥ii
	Tr. Belladonna.....	fl. ℥ii
	Tr. aurantii.....	fl. ℥i
	Aq. dest.....	ad. ℥vi

Sig.—One tablespoonful every third hour.—R. J. Blackman, *Clinical Journal*.—*Can. Pract.*

EXCORIATIONS IN CHILDREN.—In *L'Union Medicale*, the following ointment is spoken highly of in excoriations of children:

R	Acid salicylici.....	gr. viij
	Bismuthi subnitratiss.....	℥ii
	Amyli.....	℥iiss
	Ung. rose.....	ad. ℥i

M. Sig.—For external use.—*Pac. Med. Journal*.

URTICARIA.—For the relief of the intolerable itching that always accompanies urticaria, Professor Cantrell advised the application of a saturated solution of benzoic acid in water the solution to be kept in contact with the parts as much as possible.—*Philadelphia Polyclinic*.

Another excellent formula is:

R	Menthol cryst.....	gr. xxx
	Olive oil.....	℥ij

M. ft. sol. Sig. Apply to skin for itching.

A very small amount is needed.

LOEFFLER'S SOLUTION.—Many inquiries as to the composition of Loeffler's solution for topical use in diphtheria having come to the editor privately, we again publish the formula of the best of the solutions known as Loeffler's:

Menthol.....	17 grams.
Toluol.....	.36 cubic centimeters.
Absolute alcohol.....	.60 cubic centimeters.
Solution of ferric chlorid (U. S. P.....)	4 cubic centimeters.

When such sepsis exists, 2 cc. of creolin, or metacresol, are substituted for the ferric chlorid solution. We should prefer guaiacol. The therapeutic value of this solution is attested by many competent observers. The application is quite painful, and cannot be borne by the nose or larynx.—*Philadelphia Polyclinic*

DECAYED TEETH.—Just what effect upon the stomach is produced by the constant swallowing of bacteria and pus from diseased teeth, mingled with decomposing particles of food, we are unable to determine, but it is reasonable to suppose that gastric disturbances are greatly aggravated if not induced by so doing. In every community there are those who are enthusiasts on the subject of pure air and 'wholesome food, but whose mouths are in such a neglected condition that the air which passes through them is almost as polluted as that of a crowded tenement, and every mouthful of food swallowed carries with it into the stomach millions of bacteria. The almost entire futility of sterilizing articles of diet for patients in whose mouths chronic abscesses exist, or whose teeth are covered with tartar mixed with mucus and food in a state of decomposition, need hardly be mentioned. We should examine the teeth as well as other organs in the body and be able to prescribe for them.—*New York State Med. Reporter.*

THE MODERN TREATMENT OF HEMORRHOIDS.—*Mathew's Medical Quarterly* quotes Dr. J. P. Tuttle as claiming that it is far from the truth that it is rarely hemorrhoids can be cured without the use of the knife, and it is equally false that the knife is never necessary. External hemorrhoids he classifies as thrombotic, varicose, inflammatory and connective tissue piles. The thrombotic variety is treated by a free incision, the varicose variety by gentle laxatives, ice water applications and the following ointment:

R	Ung. belladon,	} ss ʒi. M.
	Ung. stramonii,	
	Ung. ac. tannici,	

As to the two last classified, they may be treated by either the operative, palliative, or antiphlogistic method. The internal form he classifies into the nervoid and varicose; for the former he applies electrocautery by a round platinum electrode, and for the varicose variety, an injection of the following:

R	Ac. carbolicl	fʒiss
	Ac. salicylici	ʒss
	Sodii biborat	ʒi
	Glycerini	ad fʒi. M

W. T. C.—*St. Louis Courier Med.*

ST. MARGARET'S HOSPITAL.—The eight annual report of St. Margaret's Hospital—a pamphlet of thirty two pages well printed and illustrated has been issued, and received at this office.

St. Margaret's Hospital is a free hospital and all patients applying for relief there must be under the care of the hospital staff, and cannot be attended by their own physicians. This is certainly an unpopular and unjust restriction. The hospital is maintained by donations solicited and collected by the Sisters of St. Margaret.

The report states that the demand for admission has been far greater than the hospital can accommodate. This is especially true in regard to female patients, many of those have waited from one to three weeks to secure a bed.

Out of the 1530 patients admitted during the year, 421 were railroad laborers, 389 were ordinary laborers, and 208 were housekeepers making two-thirds of all admitted coming from these three occupation. It is worthy of note that eleven of those admitted were clergymen and three were capitalists. The highest number of patients admitted was in October. The lowest number was in February.

Of the nationality 705 were Americans—a little less than half. The remainder coming from twenty-two different countries, 398 coming from Ireland.

847 of the cases were medical and 686 surgical.

Any of our readers desiring the report should write to the register, Dr. Thomas L. Bennett, or to the St. Margaret's Hospital, Kansas City, Kansas.

THE DISPLAY AT THE TRI-STATE MEDICAL MEETING AT ST. LOUIS.—Quite an excellent display was made by the representatives of the various manufacturing pharmacists at the recent meeting of the Tri-State Medical Society. The exhibits were all placed

in rooms of the hotel on a different floor from that in which the meeting was held; and the members were put to some little inconvenience to locate them.

We noticed the old reliable firm of W. H. Schieffelin & Co., who had a display of one or two productions. The remainder of their products were not shown.

William R. Warner & Co., of Philadelphia had one of the largest displays of their excellent line of granular salts and sugar coated pills.

The Maltine people were well represented and furnished an interesting display.

Other prominent exhibitors were: The Pasteurine Chemical Company, whose new product "Pasteurine" is becoming quite popular; The Harvard Chair Company, and McDanold Chair Company, physicians chairs; Holkamp, Grady & Moore, surgical instruments; D. Appleton & Co., medical books; The Phenique Chemical Co., manufacturers of campho-phenique and chloro-phenique, and Phillips, Clapp & Co., of Boston, manufacturing chemists.

Judging from the number of doctors who took pains to visit these exhibits, inquire into the medicines exhibited, and gather samples of the same and literature explaining their use, it would seem probable that physicians as a class are in sympathy with the idea that there is nothing unethical, undignified or unprofessional in the use of proprietary medicines. And there certainly is not, for a large number of them having been found by years of trial and experience, to be unequivocally good are becoming fixtures in the practice of medicine.

PUS IN LEFT URETER.—Since Dr. Hunter Robb has taken a place in the Western Reserve Medical College, at Cleveland, Ohio, the burden of the good work done at Johns Hopkins Hospital, seems to have fallen upon the shoulders of Dr. Howard A. Kelley.

In the February number of the *Bulletin*, are three most remarkable cases that well illustrates the skill and ingenuity of that brilliant surgeon.

In describing the first case Dr. Kelly states,

"The patient came to me with an extensive accumulation of pus in the left ureter, extending up into the pelvis of the kidney. This was caused by a stricture of the vesical end of the ureter with a dilatation above it, associated with a gonorrheal infection.

I treated the stricture by dilating it with a series of ureteral catheters, increasing in diameter from 2 mm. up to 5 mm.

After drawing off the purulent fluid, the ureter and pelvis of the kidney were washed out with medicated solutions. The calibre of the stricture was enlarged, reducing the quantity of the accumulation above it from 150 to 100 cc. The purulent character of the secretion was removed and all trace of gonococci disappeared."

Many a one who has tried to pass the catheter in the ureter, will appreciate the difficulty that confronted the doctor in this case, when in addition to the ordinary obstacle there existed the complication of a stricture, he says,

"During the whole time the patient was under treatment, lasting from the 1st of March to the 4th of August, 1894, I catheterized her left ureter about 120 times in all. The first three weeks of her stay were passed in vain endeavors on my part to get the ureteral catheter well into the ureter. Three difficulties prevented this at first. In the first place the irregular papillary prominences on the left side in the neighborhood of the ureteral orifices obscured it and made it impossible to locate it with certainty, after the first examination in which the pus was seen in it as stated; in the second place the location of the orifice was unusual, lying extremely displaced to the left; in the third place there was a spiral stricture of the intravesical portion of the ureter, and it was necessary for me to learn the twist of the stricture before I could pass the catheter at once at every sitting. I cannot say too much in praise of the tenacity and pluck of my patient throughout the first part of the treatment, which was very trying to me

and more so to her, as I was entirely uncertain as the ultimate outcome and could give no positive assurances.

After almost daily efforts for three weeks the stricture was finally cleared by an accidental turn of the hand."

After having successfully catheterized the ureter, the bladder walls were treated by occasional applications of a five per cent. solution of nitrate of silver, applied directly to the affected areas on absorbent cotton with an applicator, and by daily irrigation of a bichloride solution 1-150,000, and the ureter were frequently washed out, the treatment being about the same as to the bladder. Speaking of the results of the case he says:

"The result of the bichloride washing was a complete disappearance of pus cells, leucocytes and gonococci from the urine, and the reduction of the size of the distended ureteral tract from one holding regularly from 140-150 cc. down to 90 or 100 cc. The bladder assumed a normal appearance and she became able to sleep through the night without rising once. She gained 20 pounds in weight and resumed the rosy appearance of perfect health, with a corresponding remarkable improvement in spirits."

The second case was one of ureto-cystotomy, performed seven weeks after vaginal hysterectomy. The third was one of an anastomosis of the lumen of the sigmoid flexure through the lateral walls of the rectum at the pelvic floor without suture, and each of these two show a skill and ingenuity fully equal to that displayed in the first case. The articles are beautifully illustrated, and are well worth preserving by every surgeon who does abdominal work. They are published in the *Bulletin* of the Johns Hopkins Hospital of Baltimore for February, 1895.

BOOK TALK.

Books reviewed in these columns may be obtained of Dr. A. M. Wilson, rooms 412 414 New Ridge Building, Kansas City, Mo. Discounts where possible.

TWENTIETH CENTURY PRACTICE.

Twentieth Century Practice. An international encyclopedia of modern medical science. By leading authorities in Europe and America. Edited by Thomas L. Stedman, M. D., New York City. In twenty volumes. Volume II. Nutritive disorders. New York: Wm. Wood and Company. 1895.

In the April INDEX we noted the appearance of the first volume of this work which is to consist of twenty volumes. The second volume has now appeared and opens with an article on "Addison's Disease and other Diseases of the Adrenal Bodies," by Sir Dyce Duckworth, of London.

The second article, on "Diabetes Mellitus," is from the pen of Professor von Noorden, of Frankfurt, whose studies in metabolism have justly attracted so much attention both in this country and in Europe. Contrary to what we might expect in a treatise written by a German physiologist and pathologist, this article is intensely practical, sixty pages of the one hundred and fifty being devoted to the subject of treatment.

Following this is an exceedingly interesting article on "Rheumatism," by Dr. T. J. MacLagan, of London, the originator of the salicyl treatment of this disease.

The next article is one on "Gout," by Dr. Henry M. Lyman, of Chicago, the only American writer in this volume—and he has made a worthy contribution to American medical literature. It is not much to say that the article is one of the most thorough and comprehensive treatises on gout that has ever been written.

"Arthritis Deformans" is the title of the next article, which is from the pen of Dr. A. E. Garrod, a son and worthy pupil of Sir Alfred Garrod.

The sixth article of the volume is one on "Diseases of the Muscles," by Dr. Dujardin-Beaumetz, of Paris.

The closing treatise of this volume is one on "Obesity," by Professor Oertel, of Munich. "Oertel's" is known as one of the most successful methods of treating obesity, and the profession is to be congratulated on having a description of this method and an explanation of its *rationale* from the hand of the inventor himself.

The index is complete and satisfactory and all that is newest and best in practice is here recorded. The second volume maintains the expectations awakened by the first, and assures us of the character of the work.

ASEPTIC SURGICAL TECHNIQUE.

Aseptic Surgical Technique, with Especial Reference to Gynæcological Operations. By Hunter Robb, M. D., Associate in Gynæcology, Johns Hopkins Hospital. Professor of Gynæcology, Western Reserve University, Cleveland, Ohio. J. B. Lippincott & Co., Philadelphia, Penn. 1894. Cloth: 264 pages.

Some time ago the INDEX contained a note to the effect that Dr. Robb, had completed a book on Surgical Asepsis, upon which topic he is an authority. The book is before us and is all that was to have been expected. For many years the fertile brain of this gifted author has been enriching our literature upon the technique of operative procedure. He has devised new instruments and perfected methods of using those now in use and it is a pleasure and a satisfaction to note that this work is now gathered together and offered us in one volume along with much new matter. The opening chapter on "sepsis" is followed by chapters describing methods of sterilizing dressings, the patient's surroundings, the operator's hands and his instruments.

The care of instruments is described; various styles of gynæcological instruments noted and criticized; none of the old time cuts appear, but instead we see pictures of the modern appliances of glass and metal found in first-class operating rooms of to-day. The preparation of the patient for operation, the preparation of sutures and ligatures for use, the care and preparation of sponges, cotton, gauzes, bandages and tampons are considered on the clear, energetic style that marks the practical surgeon. In speaking of the use of antiseptic gauzes he says, "The manufacturers have reaped bountiful harvests from antiseptic gauzes made by saturating absorbent gauze with solutions of bichloride of mercury, carbolic acid, boric acid, salicylic acid, cyanide of mercury and zinc. * * * Only in rare instances do we require antiseptic gauzes. It will be generally sufficient if we render our gauzes free from micro-organisms before applying them." We should not trust the antiseptic to overcome the contamination caused by our careless handling.

Drainage, the use of the normal salt solution for a non-irritating irrigating fluid, the arrangement and care of the operating room, the surgeon's armamentarium, the after-treatment of the patient, the examination and preservation of specimens are some of the subjects whose consideration in detail complete the book.

Not a superfluous word appears; all is terse, clear and to the point. The publishers have done their work well and have enriched and embellished the work with 25 plates and about 50 cuts and figures. The whole is carefully indexed for reference.

For the treatment of leucorrhœa and foetid vaginal discharges, a reliable foreign authority recommends the following:

R Potassii chloratis	3 iij
Tr. opii	3 iij
Aq. picis liq.	3 vii

M. Sig.—Two or three teaspoonfuls to a quart of warm water, injected morning and evening.

When there is pruritis vulvæ with the leucorrhœa, a solution of equal parts of tincture of iodine and iodide of potassium should be made and a teaspoonful of this, in one or two quarts of hot tar water injected twice a day.—*Medical Summary*,

LITTLE ITEMS.

It is found that the estate of Oliver Wendel Holmes reaches a value of \$75,000.

Our new City Hospital Building is assured. Full particulars in the June number.

According to statistics for 1894 there were 17,784 medical students in the colleges of the United States and Canada.

Dujardin Beaumetz, the great French physician and therapist died at the age of sixty-one, on February 15th, 1895.

Dr. Emory Lanphear, of St. Louis, passed through Kansas City for Northern Kansas to attend a consultation call.

Drs. Gaines, Kyger and Langsdale returned from New York on the 20th, where they have been engaged in post-graduate study.

Dr. John Punton is in Europe. He will return in time to fill his chair as Professor of Diseases of the Nervous System in the University Medical College.

Dr. F. E. Way writes to the INDEX from Talmo, Kansas. Dr. Way is a graduate from the Kansas City Medical College, class of '95. We should be glad to have a few more of the class put on record.

A letter from B. F. Watson says that he has removed from Connor, Kansas, to Kansas City, Mo. He will be found hereafter as assistant physician at the city hospital. Of course the INDEX goes with him.

Dr. G. G. Kreeger, (Kansas City Medical College, class of '95), sends in his card from Lee's Summit, Missouri, where he is located for practice. His check for a year's subscription to the INDEX accompanied it.

General J. D. Griffith, M. D., Major George Halley, M. D., and Capt. Jabez N. Jackson, M. D., are attending the National Association of Military Surgeons, which meets at Buffalo, May 21st, 22nd and 23rd.

Dr. A. H. Wall, (Kansas City Medical College, class of '95), is located at the corner of Independence and Elmwood Aves., Kansas City, Mo. We acknowledge the receipt of his two dollars and he receives the INDEX for the coming year.

Dr. J. H. Duncan, of St. Louis, will deliver an address at the Commencement Exercises of the Missouri State University on June 3rd. Dr. Duncan is well known as a gifted speaker and all are proud of the honor conferred upon him.

Dr. N. O. Harrelson, formerly house surgeon at St. Joseph's Hospital leaves that position June 1st, and accepts a position under City Physician Coffin as district physician for Kansas City, Mo. His place will be filled by Dr. Frank Soden.

Dr. John H. Packard says, "I think it may be laid down as a sound rule of surgery, that in all operations there should be as little sacrifice and as little disturbance of the parts as possible consistent with the attainment of the desired end." Excellent precept that.

April may be a hard month with the doctors, but we have received a most flattering list of paid subscriptions for the month. There is nothing which contributes more to the welfare of the journal and enables the editor and publisher to make it interesting and readable, than the prompt payment of subscriptions.

Did the Indiana preacher libel all womankind, or has his experience with Indiana women been such as to justify him in making the following assertion in a sermon? "God made the earth in six days, and then rested; then he made man, and rested again; then he made woman, and since that time neither God nor man has had a rest." —*Med. World.*

An aged physician, one of the pioneers of Northwest Missouri, Dr. J. M. Larrabee died at Skidmore, Mo., May 10th, of heart failure. Dr. Larrabee served in the Mexican war, and in the war of the rebellion under General Price. He lived many years in Maryville and has been in the practice of medicine for fifty years. The doctor was a Mason and a Knight Templar.

Many of our prominent specialists attended the Kansas State Medical Society meeting at Topeka on the 16th, 17th and 18th of this month, and all report a good time and an interesting meeting. Among those present were Drs. Tyree, Fryer, Sexton, Cordier, Gant, Ritter, Pearse, J. N. Jackson, Fulton, Halley and J. E. Logan.

When consulted by a patient with a stricture, a slight gleet, or a relapsing gonorrhea, who desires to marry and wishes to know if he can safely do so, remember the words of Stansbury Sutton after years of experience and hundreds of cases, "If a woman be married to a man with chronic gonorrheal lesion the woman will not remain well." Save the woman. Forbid the marriage until one to two years after perfect cure.

We have to report the occurrence of new cases of diphtheria. In two cases recently under our observation the "hives" and the muscular pains so strongly urged by Dr. Winters, of New York as sequences of the antitoxine treatment, were observed in children who had taken no antitoxine. None of these symptoms have ever been reported to the writer's knowledge in cases where antitoxin was administered for prophylaxis.

After a protracted illness due to an infected carbuncle Dr. J. D. Griffith is again able to be around. His many friends are all glad to see him out and also glad that things were not worse with him. After a trip to Buffalo, New York, where he will attend a meeting of the National Association of Military Surgeons and will read a very interesting paper on "The Effects of Bullets from the New Springfield Rifle," the doctor will again be back at his old post.

The following officers were elected for the ensuing year at the Kansas State Medical Society held at Topeka, May 17th: President, R. S. Black, of Ottawa; 1st Vice-Pres. M. M. Gardner, of Greenleaf; 2nd Vice-Pres. Andrew Sabine, of Garduer; Corresponding Secretary, G. A. Wall, of Topeka; Treasurer, L. Reynolds, of Horton. A large number were admitted to the society and all in all it was the most successful meeting in the history of the society. A more thorough description will appear in the next issue of the INDEX.

Dr. D. W. Thomas one of the oldest practitioners of Leavenworth, Kansas, died at that city on May 11th, at his home on North Broadway. The Doctor had suffered from two strokes of paralysis during the past two months and the last one proved fatal. The Dr. has several relatives in this city. Dr. Thomas was 70 years old and a Virginian by birth. He has practiced medicine for almost 50 years, 28 years being in Leavenworth, Kansas, as a partner of his brother, Dr. M. S. Thomas. He leaves a widow and seven children.

By dividing the population of the United States into three classes, viz: Poor, middle class and rich, Dr. A. C. Matchette has gathered the following interesting statistics as published in the *Medical World*: The poor class, which represents over 50 per cent. of the entire population, owns less than three per cent. of the wealth of the country; the middle class represents 39 per cent. of the population and own 26 per cent. of the wealth, while the rich class, representing only 9 per cent. of the population, owns over 70 per cent of the entire wealth of the United States.—*Pacific Medical Record*.

The Nurses Training School of Kansas City, Mo., held its graduating exercises at the Jackson County Medical Society Hall, on May 11th, and graduated one pupil. There are now a large number of candidates for advancement and more waiting for entrance, but the school has so far been hampered by lack of hospital facilities to complete the nurses' training; however the outlook for the future is much brighter and it is believed that the school will be able to furnish places for many of those that have applied. No nurses are graduated until thoroughly competent. Such being the rule of the school its diplomas will be valuable.

The grand decoration bestowed upon Wm. R. Warner & Co., by the Belgian Government has just been received by that firm. It is an additional tribute for the excellence and superiority of the firm's ready coated pills and other pharmaceutical products, for which the house has a great name. The decoration is of the most beautiful, in gold and white enamel, taking the form of a Maltese cross, on the centre of which on blue ground is the inscription. A wreath in blue and gold surmounts the cross, the whole being topped by ribbon, tied in a bow, of the national colors. The design is very pretty and the recipients are, of course, delighted over the award and the form it has taken.—*Philadelphia Inquirer*.

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READING NOTICES.

I have derived the most satisfactory results in all nervous troubles from the use of Peacock's Bromides. I frequently prescribe it and I invariably do so when bromides are indicated, since I am certain to get permanent results.

Boston, Mass.

FRED'K G. MOORE, M. D.

"COCA" has maintained its reputation as a powerful nerve stimulant, being used with good results in nervous debility, opium and alcohol habit, etc. The highly variable character of the commercial drug makes it uncertain, however. Robinson's Wine Coca (see page 10) we believe to be a uniformly active article, it being prepared from assayed leaves, the percentage of Cocaine being always determined by careful assay.

Walter W. S. Corry, M. D., L. R. C. S., I. & C., Rosedale Abbey, Pickering, Yorkshire, England, writes: I have used Iodia, and am satisfied that it is a very powerful alterative, and a great improvement on the old combination of iodide of potassium and sarsaparilla the latter drug itself being most doubtful in its effects, while the preparation is valuable also as a diuretic, a thing of no small consideration in most of the diseases in which it is indicated.

REMOVE THE CAUSE.—If your patient is pale, weak, nervous, irritable and losing flesh, he is suffering from Malnutrition, "caused by" Indigestion and Malassimilation; remove the cause by giving two fluid drachms of Seng before each meal.

REDDING, CAL.

WHEELER CHEMICAL WORKS:

Gentlemen:—I would not take ten times the cost of Noitol and be without it. It is without exception, the finest application I have ever used in Eczania.

Yours truly,

F. P. MITCHELL, M. D.

The Wm. S. Merrell Chemical Co., Cincinnati, O., believe that "written labels on Fluid Extracts should always be looked upon with suspicion. A few houses still fill out "fractional pounds" from larger packages, but the system is being discarded for obvious reasons. To fill "orders as written" is the aim of every jobber who would secure a permanent business, and every action tending to destroy confidence is avoided. Again, why should the risk of identity and quality be assumed by the jobber when it belongs solely to the manufacturer? The Wm. S. Merrell Chemical Co. take every responsibility connected with their fluid extracts in original packages, but decline "to father" any article claiming to be "Merrell's" sent to the dispenser or consumer with a written label.

CELERINA.—We have long been acquainted with the reputation of this fine pharmaceutical preparation. Celerina is a nerve tonic, stimulant and antispasmodic. It is prepared from celery, coca, kola, viburnum and aromatics, and is especially indicated in loss of nerve power, nervous headache, neuralgia, brain fog, neurasthenia, alcoholic excess, inebriety, drunkenness, opium habit, paralysis, dysmenorrhea, hysteria, sexual incapacity, spermatorrhea, impotency, and, in fact, in all languid and debilitated conditions of the system arising from excessive expenditure, or abuse, of the sexual functions, or over-indulgence in alcohol, and confirmed drunkenness. So far as our experience goes in the use of Celerina, we have found it an excellent and efficient nerve tonic, acting especially upon the organs of generation, giving tone to the nervous system and continence to the sexual organs, without the slightest irritation or increased excitement. In these cases Celerina is a remedy of marked therapeutic and curative value.—*Practitioner*, London, Eng.

In the after-treatment of a case where an "operation for the relief of an impermeable occlusion of the œsophagus of five years standing" had been performed, which operation was reported at length in the *N. Y. Medical Journal* of March 23rd, 1890, Dr. Augustus C. Bernays, A. M., M. D., Heidelberg, M. R. C. S. Eng., Professor of Anatomy and Clinical Surgery at the Marion-Sims College of Medicine, the operating surgeon says:

"The patient rallied fairly well after the operation, but she became greatly emaciated. Liquid food was given at short intervals and stimulants as indications demanded. In order to allay the extreme nervousness and irritability, antikamnia was given and it acted promptly and satisfactorily in every instance."

Of the further history of the case it may be stated that on the seventh day after operation, the patient took into her stomach through the natural channel the first food which had passed it in five years; and that in two months convalescence was regarded as fully established.

Dissolved in the "Wine of Cod Liver Oil" (Stearns) are the active principles of Cod Liver Oil, to the exclusion of the oil itself—a statement which a somewhat extended examination has to some extent confirmed. Thus on extracting the wine with ether and carefully treating the ethereal extract (which is an oily, brown resinous body, having a peculiar fishy smell) with a strong sulphuric acid solution of glucose, the beautiful purple reaction characteristic of biliary constituents is obtained. The same reaction is effected when the extract used in the preparation of the wine is similarly tested, but to a more marked degree. Recent investigation has led to the isolation of several distinct bodies in Cod Liver oil, notable amongst which are the alkaloids aseline and morrhaine, in association probably with morrhuc, formic, butyric and phosphoric acids. These principles have been tested clinically, and the results formed the subject of an exhaustive report by Gautier and Mourgues in the *Journal de Pharmacie*, March, 1890, who concluded that the combined active principles of Cod Liver Oil act as powerful stimulants of nutrition and assimilation, and show definitely the nature of the principles to which the oil to some extent owes its valuable medicinal properties. The wine evinces an acid reaction, is alcoholic, and contains also peptonate of iron.—*Lancet*, London, Eng., July 7, 1890.

KANSAS CITY MEDICAL INDEX,

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WHOLE No. 186.

ORIGINAL ARTICLES.

EXTENSIVE THORACOPLASY BY SCHEDE'S METHOD.*

BY W. W. KEEN, M. D., PHILADELPHIA, PA.

Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College.

A. K. S., of Blacklick Station, Indiana County, Pa., aged thirty years, was admitted to the Jefferson Hospital, March 11th, 1894.

The family history is negative. He had all the usual children's diseases, and four years ago a severe attack of enteritis. Twelve years ago, after a severe attack of pneumonia lasting six weeks, left sided pleurisy set in. Two months later a small incision was made between the sixth and seventh ribs just to the left of the nipple line, and a drainage-tube was introduced. For fourteen months a small amount of pus escaped through the opening after removal of the drainage-tube. Then the opening was enlarged, and over two quarts of pus were evacuated in twelve hours. A large drainage-tube was then inserted. He immediately began to gain in weight, and says that he gained thirteen pounds in the first fourteen days. His weight had been as low as ninety pounds, though he is six feet tall.

Status Præsens:—Weight, 145 pounds; appetite good, and he feels very well; no bloody expectoration. Between the sixth and seventh ribs, just to the left of the nipple line, is a drainage-tube which he has worn continuously for nearly eleven years. About half an ounce of pus escapes from it in twenty-four hours. Occasionally it is blood-stained, and he has had an even greater amount of blood escape when excited by coughing or by the introduction of a new tube, sometimes losing over a half pint of blood. The whole left chest is much sunken in.

Operation March, 14th, 1894.—A vertical incision was made just outside the line of the nipple, and about two inches of the seventh and eighth ribs were resected, exposing the upper surface of the diaphragm. Starting from the

*Read before the Philadelphia Academy of Surgery, March 4th, 1896.

opening in the chest cavity, it was with the greatest possible difficulty that I could resect the ribs, since they were absolutely in contact as the result of the deformity of his chest. The pleura was also over an inch in thickness which made the thickness of the chest wall about two inches, and therefore very rigid.

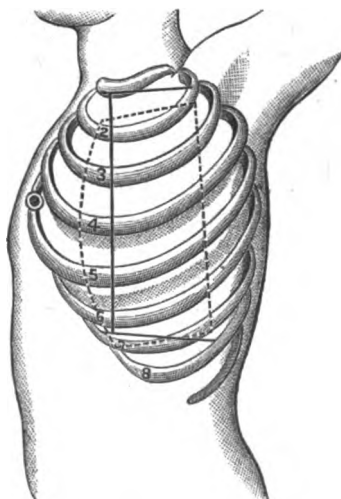
In addition to this the left lung was firmly bound down and so contracted that there was practically little lung tissue in use. Hence, as his respiration was almost confined to the right lung I had to watch the ether very carefully, and by the time that I had resected these two ribs it was very evident that the operation should be terminated, and anything further left for a future date.

The wound was packed with iodoform gauze. His highest temperature after the operation was 99.8°. The cavity of the chest was washed out with pyoktanin, boric acid, sublimate solution, etc., at different times.

He left the hospital May 28th, 1894, in much better health and with little annoyance from the large cavity remaining in the chest, from which the discharge was comparatively slight. He is to return for a second operation.

Second Operation, Jefferson Hospital, June 30th, 1894.—Examination by a long probe showed that the cavity of the pleura was very large and extended to a level with the clavicle. My intention was to resect as much of the chest wall as possible. I was obliged to be extremely careful of the anæsthetic, as I had been in the previous operation, lest having little more than one useful lung, the anæsthetic and the operation together might prove fatal. I made a vertical incision from the clavicle to the still existing opening into the chest cavity followed by two horizontal incisions at each end of the first. I then dissected the soft parts from the ribs internally to within an inch of the left border

FIG. 1.



The solid line shows my incision. The dotted line shows the portion of the bony and muscular chest wall removed. The posterior line should be further back.

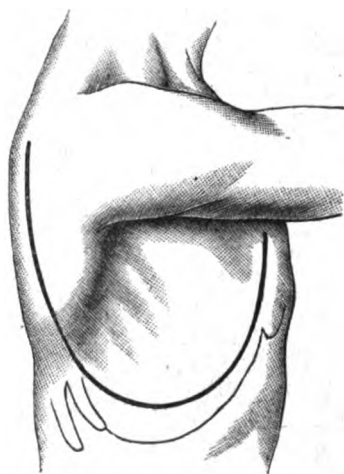
of the sternum, and externally to a point an inch posterior to the anterior border of the scapula. Then, guiding a large pair of bone forceps by my finger, and starting from the existing opening, I cut ribs, muscles, pleura

vessels and nerves, *i. e.*, the entire thickness of the chest wall up to and including the second rib, then, starting again from the prior opening outwardly to a point a little in front of the inferior angle of the scapula skirting the upper surface of the diaphragm, then from this point directly upward, and again horizontally on a level with the second rib. Most of this large mass, on account of its thickness, had to be removed piecemeal, part of it in two or three large pieces. The size of the portion removed was approximately eight inches vertically by five inches horizontally. A number of the larger intercostal arteries bled, but were seized with hæmostatic forceps, and finally, even without ligation, on the application of very hot water, ceased bleeding. The inner wall of the cavity was found to be enormously thickened visceral pleura and pericardium, stretching like a vertical diaphragm from front to back at a point about an inch external to the left border of the sternum. This was thoroughly curetted and swabbed. The flaps were then laid directly upon the thickened pleura and pericardium and sutured in place. His recovery was without incident, though slow. The reaction was very moderate.

October 6th, 1894.—He came to the hospital again to-day to see me, and I found the only remnant of the wound was a cavity about as thick as a lead pencil and an inch-and-a-quarter deep. With light packing this will soon heal. His chest is very much deformed from falling in of the wall, but the cavity is entirely obliterated. His general health is excellent.

The opening closed entirely about the middle of November, and he is present this evening for your inspection.

FIG. 2.



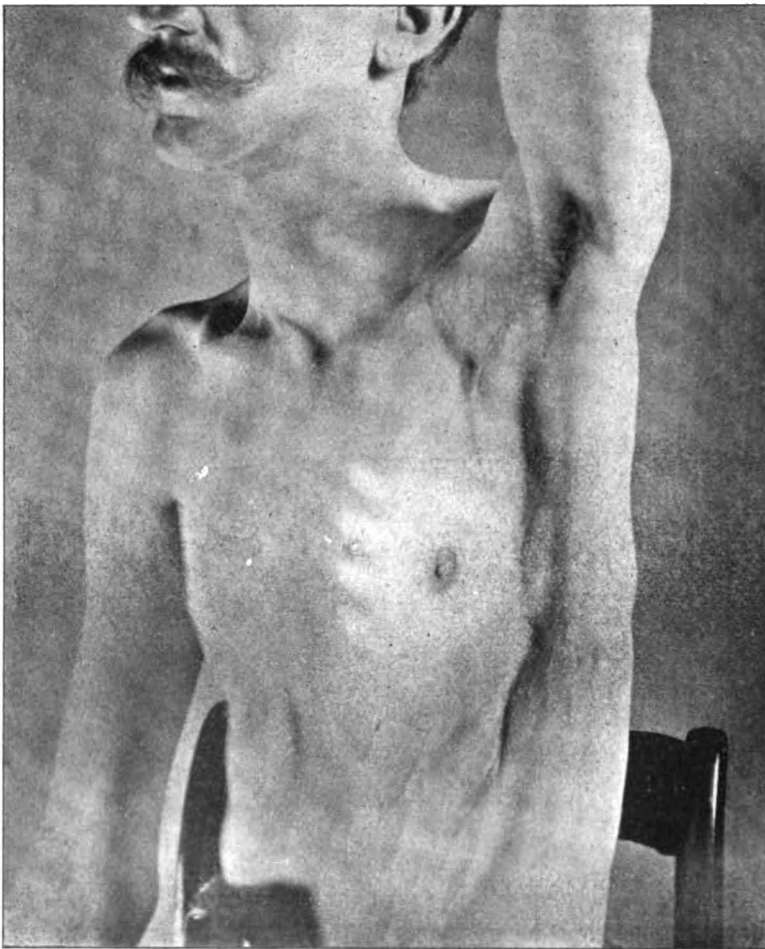
Schede's incision for thoracoplasty. (REMARKS.)

REMARKS:—The present is by far the most extensive resection of the wall of the thorax that I have ever done. The first operation was practically preliminary, simply to gain access to the cavity of the pleura, and had to be terminated somewhat abruptly on account of the difficulty of the etherization. The second operation was attended with less difficulty from the anæsthetic and was fully carried out.

The operation which I made I have subsequently found has been described by Schede as a modification of Estlander's operation, or rather, perhaps, in suitable cases as a substitute for it. In the present case Estlander's operation would have been useless, on account of the immensely thickened pleura.

Schede makes a large semi-circular flap, (Fig. 2), with its base at the second rib, its curve beginning on the front of the thorax and sweeping downward and backward in a large curve which includes the larger part of one-half of the thorax. In my own case, the soft parts were dissected from the ribs by a vertical incision with two horizontal incisions at the upper and lower ends of the first, making an L (Fig. 1). It seemed to be equally satisfactory with that of Schede.

FIG. 3.



Result after thoracoplasty. Note the motility of the arm.
(Photographed by J. M. Bertolet.)

The ease with which the operation was done, and the admirable result,

commend it to me very strongly. Nothing less radical would have effected a cure. The vessels were controlled without the slightest difficulty by hæmostatic forceps, not even a single one requiring ligation.

His present condition (Fig. 3), eight months after the second operation, is curious. The thoracic wall, where its entire thickness has been removed, is as firm and resistant as if the ribs had never been removed. This may be due to two causes: First, the tension of the soft parts of the old chest-wall, which stretch like a drum-head from the anterior to the posterior border of the opening I made; second, the thickened pleura and pericardium on the median surface of the old empyemic cavity, furnish a very firm resistant base on which the flap presumably rests. I intentionally use the word "presumably," for on percussion the entire left chest is resonant, and even tympanitic, as if there were a pleural cavity still existing. Were this really the case there would certainly, however, be a considerable amount of pus secreted, and this can scarcely be the fact, in view of the healing of the cavity for so long a time. Moreover, in October last, when I examined him with a probe, no cavity, but only a small sinus existed. The lung can hardly have expanded enough to fill the cavity, for a pleura an inch thick can scarcely have been absorbed to such an extent as to allow of such expansion. The respiratory murmur, however, is heard for an inch external to the left border of the sternum.

The posterior portion of the ribs form a marked projecting ridge near the posterior axillary line. It looks as if the resections were much less extensive than I have described, but this is due to a lateral curvature of the spine to the left, thus making the spinal part of the ribs much more prominent than would otherwise be the case. The movements of the arm are perfectly free (Fig. 3), the removal of the greater part of both pectoral muscles having had no restraining effect upon this free shoulder motion.

The apex beat of the heart is in the normal situation.

He has not gained in weight very much, but his general health is excellent.

A few days after he was shown to the Society the wound broke open again and discharged a small quantity of pus. I then did a third operation, removing some more of the chest wall at the upper posterior angle. I found a cavity $3\frac{1}{2}$ inches long and as thick as the thumb. This is now (March 27th) nearly obliterated by granulation tissue. His general health is re-established and he is now, I believe, entirely cured.

CASE OF GUNSHOT WOUND OF ABDOMEN AND LUNG.*

BY LEWIS W. STEINBACH, M. D., PHILADELPHIA, PENN.

A. H., aged thirty-six years, white, a Philadelphia police sergeant, was admitted to the Polyclinic Hospital August 30th, 1894. Twenty minutes previous to admission he had been accidentally shot, in the abdomen by a 44-calibre pistol.

His temperature on admission was 98°, pulse 60, respirations 28. He was

*Read before the Philadelphia Academy of Surgery, March 4th, 1896.

weak and faint, although externally he had not lost much blood. With the assistance of two officers he had walked from the place of shooting to the hospital, comprising several blocks.

Patient complained of some pain around umbilicus, and was unable to void his urine.

The history obtained from the patient states that he was sitting in a chair while the person who shot him was standing to his right, the pistol pointing slightly to patient's left. On examining the abdomen a small wound one-quarter inch in diameter was seen two inches below and to the right of the umbilicus.

After cleansing the part a probe was gently inserted into the wound, and it was probed in all directions. The muscles had been torn up in several directions, so that this was not satisfactory, although there seemed to be a track in an upward direction and to the left, which from the history seemed to be the true course which the ball had taken. A small quantity of sterile water was then injected into the wound; but, as it returned, it could not be made out that the abdominal cavity had been entered, although this was what was thought to be the case.

Upon consultation with three of the hospital surgeons it was decided to etherize the patient, follow the upward track, and if the abdominal cavity had been entered, to do a cœliotomy in order to ascertain the extent of injury.

Patient was etherized, and after all antiseptic precautions had been taken, a grooved director was introduced into the wound, and after some little trouble, as the track was irregular, it was laid open to about an inch in extent. Upon pushing the director further it entered the peritoneal cavity. The consensus of opinion was to do a laparotomy. A three-inch incision was made in the median line, and upon opening the peritoneal cavity a considerable quantity of blood escaped through the wound. The intestine were carefully examined, and nine perforations made by the bullet were found. These were principally in the lower part of the jejunum and the ileum. One was wholly in the mesentery, while the others chiefly lay at junction of it with intestine; and it was from these that the greater part of the blood was oozing. The colon was not perforated.

The various perforations were sutured with Lembert suture, silk being used. After carefully going over the small intestine they were replaced and the abdominal cavity thoroughly washed with warm sterile water until all blood and clots were removed, and the fluid returned clear. A glass drainage tube was placed in the lower part of the wound, and silk-worm gut sutures introduced, closing the incision. The ordinary antiseptic dressing was applied.

The bullet had not been found, but was thought to have taken an upward course to the right of the spinal column.

The operation was a long one, and it was found necessary to administer strychnia and atropia to combat the shock. Temperature after operation was 99.8°; pulse, 120; respiration, 28.

The patient came out of the ether and seemed to rally; but, during the evening, his pulse became weak, thready, and very rapid, reaching 156 by 9

P. M. The temperature kept rising slowly and steadily until 3 A. M. it reached 102.4°. About 3iv. fluid blood and serum was obtained through the drainage-tube. It did not clear, though it lessened in quantity toward morning. It was also noticed that the patient coughed up a small quantity of a dark chocolate-colored fluid. Stimulating treatment was kept up during the night. He complained greatly of thirst, was extremely restless, it being with difficulty he was restrained in bed. But at no time did he complain of pain.

The pulse became weaker and weaker, and at 8:36 o'clock the morning following operation, he died. Temperature taken half an hour previous to death registered 105.6°.

An autopsy was held by the Coroner, and it was found that the bullet had pursued an upward course after striking the spinal column, passing beneath the diaphragm, rupturing some of the vessels at the root of the right lung, which was engorged with blood. The right pleura was filled with blood. There was also blood in the abdominal cavity, due to rupture of small vessels in liver tissue. The intestines looked ecchymotic in places; but the places that had been sutured showed commencing union. The bullet was not found but traced to muscles of the back.

SOME CASES OF SUPPOSED STOMACH DISEASE AND THEIR ULTIMATE DIAGNOSIS AND TREATMENT.

BY HERMAN E. PEARSE, M. D., KANSAS CITY, MO.

Professor of Anatomy Kansas City Medical College ; Editor Kansas City Medical Index.

He who chooses stomach disorders and diseases for an especial study will have no lack, in America, of clinics, but he who confines his practice strictly to the cure of diseases of the stomach will have a narrow field for his labors. I mean by this, if indeed the proposition requires an explanation, that the majority of patients suffering from stomach disturbance, have as a cause of such disturbance in many cases, a disease remote from the stomach and to which the symptoms may be directly referred. A glance at the following cases will prove the correctness of my position.

CASE I.—Mr. D—, 39 years of age and of powerful build, was referred to me by a minister who had been pleased with the result of an operation I had successfully performed upon a poor wash-woman of his parish. I removed a very troublesome ovarian cyst from the woman giving her complete and speedy relief. Understanding that Mr. D— had cancer of the stomach, this minister referred him to me for its possible removal. I found the patient much emaciated, suffering from constant gastric pain, frequent and distressing vomiting and so weak that for many months he had not left his room. After a few visits, in which I was unable to find conclusive clinical signs of cancer although that diagnosis had been made by good observers, I obtained some of the gastric contents, and the analysis showed conclusively that the gastric functions were practically intact. Further investigation revealed an inequality of the pupils, a hesitating gait, complete loss of the patellar reflexes, some anæsthetic spots, not however well marked, in the lower limbs, and a history of gradual onset

extending back several years. The patient was taking from 6 to 12 grains per day of morphine with atropine hypodermically and almost no nourishment. This morphine habit was broken, the irritable stomach quieted by lavage and warm liquid nourishment given. As medicine he was given various combinations of bitter tonics and sedatives, among which were cinchona, jamacia dogwood, lupulin, condurango, and strychnia, and arsenic was pushed to the limit of easy tolerance; the man recovered and while I cannot hope to entirely relieve the sclerosis from which he is suffering, yet by a continuance of this treatment assisted by frequent impressions of iodide of potash in large doses he has so far recovered that he attends to his duties as railway conductor and has done so for about two years.

CASE II.—Mrs. K., widow, consulted me April 4th, 1894, for cramping pain in the stomach and right hypochondriac region. She had had several previous attacks more severe, of this cramping pain accompanied by vomiting and partial collapse. A tumor was discovered that lay below the border of the ribs on the right side about one and one-half inches to the right of the median line. The tumor was dull on percussion but deeper percussion gave some resonance. It rose and fell with each deep respiration, was about two and one-half inch long, and one and one-half inches wide and extreme tenderness existed around it, but the tumor itself was not very sensitive. A test of the stomach showed some dilatation, and absence of hydrochloric acid one hour after a test meal and same three hours after a full meal. The tumor moved when the stomach was inflated. The patient's age was 54 years, her grandmother had died of cancer of the stomach, and her mother of a tumor of the stomach, said by the family to be "aneurism." From the previous history—the even size of the tumor and the character of the pain, a diagnosis of gall-stones seemed justified; yet her age, poor health and the results of chemical tests, as well as the percussion symptoms and the motility of the tumor warranted a diagnosis of pyloric cancer involving also the cystic ducts. Operation was advised and accepted. On May 2nd, 1894, I performed laparotomy, cutting down over the tumor and entering the abdomen through the right linea semilunaris, Dr. J. F. Binnie kindly assisting.* The gall-bladder was found distended with calculi and *firmly fixed to the duodenum near the pylorus* which accounted for the percussion note and motions of the tumor when the stomach was dilated. No evidence of cancer could be found.

The gall-bladder was incised, the calculi (as far as could be easily done) removed and the wound stitched to the abdominal wall, drained by a large tube and the margins well packed with gauze, and the patient put to bed to await the formation of firm adhesions. The cramping pains continued.

On May 12th, 1894, she was again anesthetized and the remaining calculi removed, the last being over half an inch in diameter and so firmly wedged in the cystic duct that it had to be broken before extraction could be accomplished. The gall-bladder was drained as before, packed and the patient made comfortable. Large quantities of bile flowed from the opening after this second operation and complete relief of the pain followed. Her recovery was complete.

*This case has been previously reported.

CASE III.—Mr. R., of Las Vegas, New Mexico, consulted me in 1894, for recurrent attacks of pain and vomiting. The attacks resembled attacks of gall-stone colic, but no tenderness, no tumor and no icterus were present. Analysis of the stomach contents showed a normal condition of digestion but an excess of acid. During his stay in this altitude and climate he had no symptoms of his recurrent pain. Diet and treatment calculated to control the hyperacidity were advised. He returned home and soon after took a trip to his old home in England and seems to be entirely relieved. I have had occasion to note in a number of patients from New Mexico and western Kansas a similar condition of recurrent pain and I am inclined to place the blame largely with the alkali water of that region. It is a known fact that continued administration of an alkali will increase the secretion of acid by the stomach and tend toward such an accumulation of it as might easily account for the attacks of pain.

CASE IV.—Mrs. L., wife of a Kansas City attorney, consulted me for stomach trouble in June of 1894. She was much emaciated, vomiting frequently and at all times much nauseated. She stated that the nausea "went to her head" causing her to faint. The fainting fits amounted to complete unconsciousness and varied from three or four in a day to as many in a week. The stomach tests were negative. Physical examination showed slightly swollen ankles, some eruption (irritant acne) upon the body, marked anæmia of all the tissue and urinalysis showed the very remarkable specific gravity of 1002. The heat and nitric acid tests gave no reaction for albumen, but by Millard's test, albumen in trace only was discovered. Free flushing of the kidney, the administration of iron in varying forms and combinations, and the corrosive chloride of mercury in minute doses long continued, diet adapted to nephritis, in which milk and milk foods held a prominent place, and a few vapor packs stopped the progress of the trouble, and restored her to a useful woman. The nephritis is not cured and will not be, but her symptoms have about all disappeared and she has before her the prospect of many years of happy life.

Nausea, pain in the stomach and vomiting were prominent features in all these cases and were the symptoms that drove the patients to seek my assistance, yet in every case there was no true disease of the digestive apparatus present.

531 RIALTO BUILDING.

EXPERIMENTS WITH THE NEW UNITED STATES (KRAG-JORGENSEN) ARMY RIFLE.—PROTECTION OF THE SOLDIER.*

BY EX-BRIG. GEN'L. J. D. GRIFFITH, N. G. M., KANSAS CITY, MO.

Professor of Surgery Kansas City Medical College, etc.

Mr. President and Gentlemen :—

In my report of experiments made to you, in 1893, in Chicago, the conclusion was reached that the new Springfield rifle, was anything but a humane weapon, at the distance of 800 yards, or less, and that at one thousand yards or more its explosive effects were slight.

On September 1st, 1894, accompanied by Brig. Gen. Moore, Lieut. Col. Pearson, Maj. Geo. Halley, and Captain J. N. Jackson, the last two being Surgeon and Assistant Surgeon respectively in the Third Regiment, also

*Read before the Association of Military Surgeons of the United States, Buffalo, New York, May 21st, 1895.

Drs. H. E. Pearse, Geo. O. Coffin, Langsdale, Newton McVey, Wm. T. Stark, and several other gentlemen, I caused a second series of experiments to be made on the range at Ft. Leavenworth, Kas. I had at my disposal the rifle and ammunition furnished by Adj. Gen. J. A. Wickham, of Missouri.

The day was gusty, the wind blowing nearly diagonally across the flight of the missiles. It took considerable firing to obtain the range at the distance of 1000 yards. I might say while on the subject that the range was gotten by placing a second target about eight feet to the windward and aiming at this.

The following is the result of missiles fired into a cadaver of a full grown man, at the several distances mentioned therein :

Shot No. 1. Struck the left leg just to the left of the patella, making a clean cut through, passing out at a point opposite and behind. Wound of entrance and that of exit the same in appearance. No difference in the size of these two wounds.

No. 2. Struck in the left side of the abdomen, in the hypochondriac region, passing out just above the sacrum. Wound of entrance and that of exit both small and clean cut and of the same size.

No. 3. Struck the center of the abdomen just below the umbilicus. Passed clear through and out through the lumbar vertebra. Wounds of entrance and exit the same.

No. 4. Struck the abdomen on the right side in the region of the liver. Passed out through the right side posteriorly.

No. 5. Struck the abdomen just below the border of the ribs on the left side passing clean through.

The cadaver was now moved up to a distance of 500 yards and about four feet is allowed for windage.

No. 6. Struck the left thoracic region passing through and out one and a half inches to the left of the vertebral column.

No. 7. Struck the left side of the abdomen in the region of the descending colon, passing through and out.

No. 8. Passed through the ulna at the junction of the middle and lower third. Wounds of entrance and exit in the skin here appear the same.

No. 9. Passed through the lower abdomen in the center line and out through the sacrum. Seemingly this shot passed through the bladder.

The gun is now changed to 350 yards.

Nos. 10, 11 and 12. Passed through the chest in and around the sternum and out at similar points behind. Wounds of entrance and exit appear the same.

Nos. 13, 14 and 15. Struck the abdomen all to the left of the median line and out correspondingly.

No. 16. Struck the head in the very center over the nose and passed out behind at the junction of the parietal and occipital bones.

All of the wounds of exit at the different ranges of 1000, 500 and 350 yards presented very much the same appearance. This was simply a puncture the size of, or a very little larger than the bullet, and perfectly clean cut as far as could be seen.

Wounds at the different ranges were marked by plugs, of different color at the time of each shot. The cadaver (presenting the appearance seen in the accompanying photograph) was now taken down and post-mortemed by Drs. Pearse and McVey.



PHOTOGRAPH OF CADAVER.

It was noticed at the post-mortem that in wounds of 1000 yards where the gut was perforated, these perforations varied from one-half to one inch in diameter. It is but fair to say that at the time of injury of these small intestines they were partly filled with fluid or semi-fluid contents, as their escape could be noticed at the time of placing the pegs.

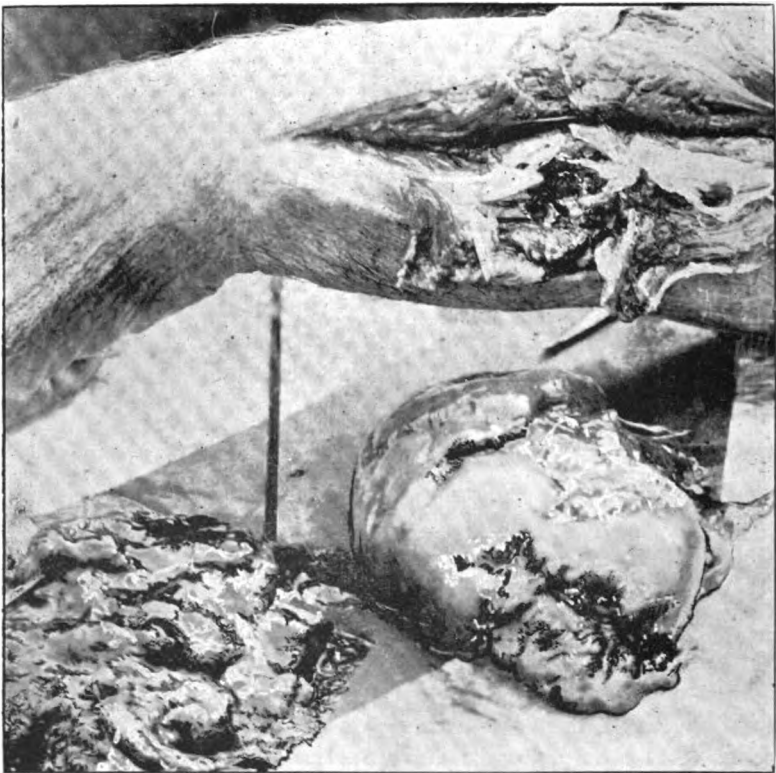
No wound of less than a half inch in diameter was found in the intestines where the range had been 500 yards.

The mesenteric wounds were all from one and a half to two and a half inches in their rents. The one going through the sacrum at its third joint a little to the left of the median line, fractured this entire bone in all directions, splintering it completely.

The 500 yard wound which passed through the spleen, as per photograph, showed a very ragged tear from one and a half to two inches in diameter. The wound of exit was at least two and a half inches, splitting the spleen almost in half. (See cut next page.)

One of the 500 yard bullets passing close to and grazing the kidney, tore its capsule for a distance of one and a quarter inches, severing, as if by knife, the large vessels, as shown by the photograph herewith attached.

One 500 yard bullet passed through the left chest fracturing the rib in three longitudinal shivers, and making a tear in the left lung one and a half inches in diameter. The ball passed through the lower lobe of the left lung, after fracturing the rib forming an opening the size of the diameter of the rib; rib was much comminuted; the posterior chest wall somewhat torn and the wound of exit was the same size as that of entrance, which was the size of the ball.



PHOTOGRAPH OF (1) SPLEEN, (2) KIDNEY AND (3) ULNA.

Another 500 yard bullet passed through the sternum, with some comminution of bone, just to the right of the median line, through the right auricle of the heart, making wounds of entrance and exit one-and-one-half inches in diameter, and the right ventricle making wounds of entrance and exit about one-half inch in diameter, piercing the thoracic aorta making wounds one-half inch in diameter clean cut, passing through the posterior wall causing a comminuted fracture of the rib and leaving the wound of exit from the body the same size as the bullet. A 1000 yard bullet caused a wound of the knee-joint, the wound of entrance the same size as that of exit. There was no damage to the cancellated structure, beyond the track of the bullet. A wound

of the ulna at a distance of 1000 yards completely fractured and comminuted it for a distance of one and a half inches on either side as shown by the accompanying photograph. (Cut page 192.)



A—POSITION OF SKULL WOUND, SHOT NO. 8. (PAGE 196.)

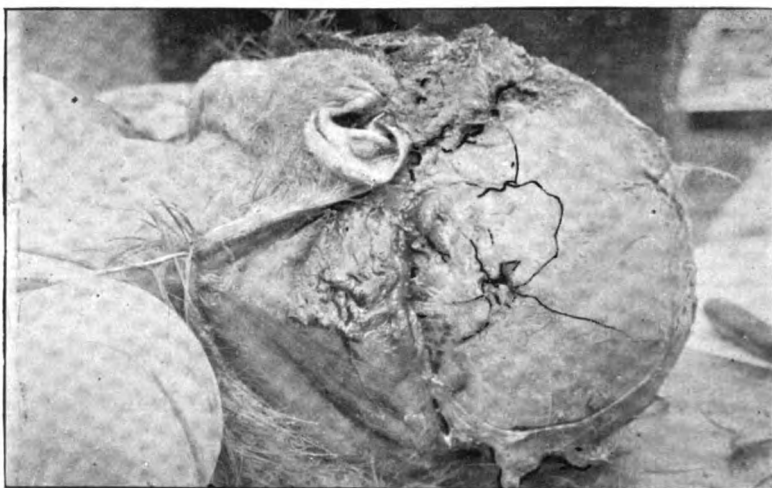
A wound of the skull at 350 yards, one-half inch above the nasal notch, ball passed through the anterior, middle and posterior lobes of the brain making exit from the skull, one and a half inches posterior and to the left of the mastoid process as shown per photograph. Wound of entrance in the skin



WOUND OF ENTRANCE IN BONE.

and outer table, same size as the ball. The inner table opposite this point extensively fractured. Stellate in character. Brain on this side completely dis-

organized. Longitudinal fracture of the skull extending from the wound of entrance, to the junction of the lambdoidal and sagittal sutures. Fracture



WOUND OF EXIT IN SKULL.

also from the wound of exit through the posterior superior angle, of the left parietal bone, to the middle of the right parietal eminence. Wound of exit in the skull three-quarters of an inch in diameter and very badly splintered.

I found a great many of the bullets just behind the cadaver in loose earth buried only from two to four inches, occasionally finding one on top of the ground. This led us to the inquiry as to *why* should we find these bullets in this position. On commencing to investigate the penetrating quality on earth



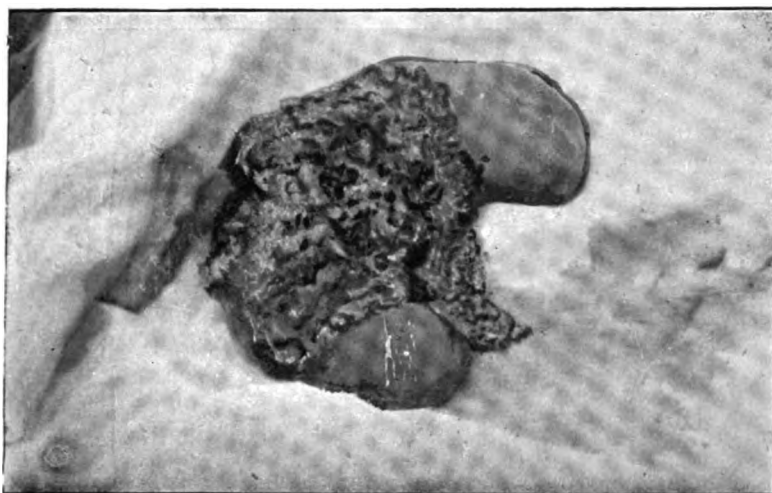
BULLET FOUND IN OLD EARTH.

works, old and new, we here hand you by photograph, a bullet dug from old

earth works a distance of at least thirty-six inches from the surface without the slightest deformation. And now firing into rapidly made "Pickett" earth works, I found that it was impossible to penetrate loose earth works more than eighteen inches, accompanied with complete upsetting of the ball as seen by this photograph. (See page 200.) Not a single ball penetrated beyond eighteen inches of loose earth at any distance from 500 yards down to thirty yards.

On April 6th, 1895, accompanied by the same gentlemen in part and by Dr. Terrill, U. S. A., of Ft. Riley, I made the third series of experiments at the same place. The cadaver used in these experiments being that of a younger and smaller person than the first mentioned. The day was gusty, and it was only after considerable practice that the range was acquired. The following are the notes of the firing:

No. 1. 600 yards. Struck in the left lumbar region. Wound of entrance and exit each from one-half inch to one inch in diameter. Kidney



WOUND OF KIDNEY.

torn one-half inch in length. Wound of entrance in kidney same as that of wound of exit. Passed out one and a half inches to the left of the spinal column leaving the exit from the skin the same size as that of the bullet.

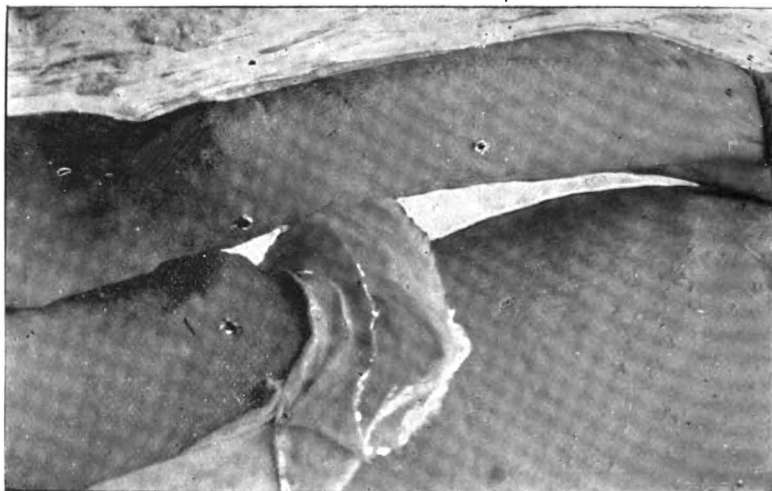
No. 2. Wound made at the same range in the left iliac region one inch to the left of the anterior spine. Entered the abdominal cavity perforating the sigmoid flexure of the colon. Wounds of entrance and exit the same, one-half inch in diameter. Bullet passed out at the posterior margin of the ilium, one inch external to the sacro-iliac symphysis making a stellate fracture of the ilium reaching up to the crest and inwards to the symphysis; the wound of exit in the skin same as wound of entrance.

No. 3. 600 yards. Wound in the right iliac region. Entered one inch above the right anterior spine, did not enter the abdominal cavity. Struck the ilium on the inner edge of the crest, two inches back of the anterior spine, comminuting the ilium. Wound of entrance three-quarters of an inch in

diameter. Ball passed through the ilium leaving a bridge of bone one third of an inch wide, and one-eighth of an inch thick unbroken along the edge of the crest of the ilium. Wound of exit from the skin the size of the ball.

No. 4. 600 yards. Bullet struck the right fore-arm about the middle, passing between the radius and the ulna without injuring the bone or any large blood vessels. There was no severe laceration of tissue. Wounds of entrance and exit and the track of the bullet all about the size of the bullet.

No. 5. 600 yards. Struck the hand. Wound of entrance the size of the ball. Passed between the two extensor tendons of the hand without wounding either. Bullet passed through the head of the radius. Wound of entrance in the dorsal surface of the radius the size of the ball, one-half inch from the articulation of the wrist. Styloid process not fractured. Wound of exit produced a stellate fracture, on the under surface of the radius, extending upwards two inches. Cancellated structure pulverized.



POSITION OF WOUNDS IN ARM, HIP AND ABDOMEN.

No. 6. Wound of the chest at 1000 yards. Wound of entrance to the left of the sternum, in the second intercostal space, one-half inch to the left of the median line. Passed through the sternum to the left of the trachea, and above the arch of the aorta. Wound of exit one-half inch to the right of the second dorsal vertebra. No fractured bones. No damage to the vital parts or organs.

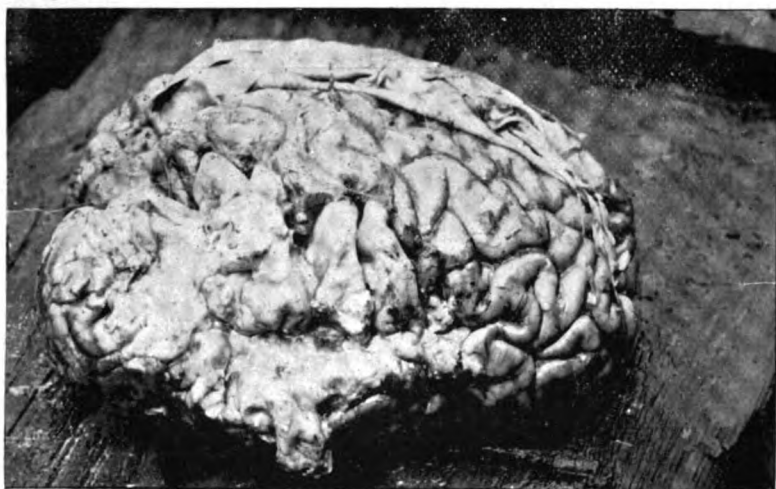
No. 7. Wound at 1000 yards. Struck the right clavicle at the junction of the outer and middle thirds. By this bullet wound about one inch of the clavicle was destroyed, being finely comminuted. (See cut next page.)

No. 8. Wound of the skull at 500 yards. Bullet struck the forehead at the lower angle of the right orbit. Wound of entrance in the skin size of the bullet while that in the skull was considerably larger. The skull was terribly fractured in all directions around the opening. The bullet passed directly



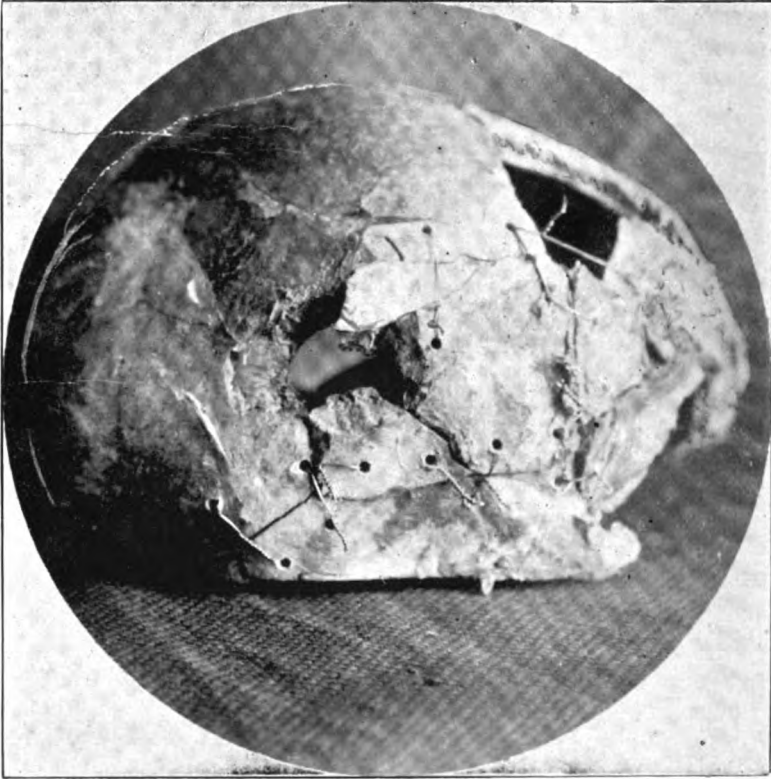
WOUND NO. 7—RIGHT CLAVICLE.

through making absolutely no ricochet, and completely pulverizing all of the contents of the right side of the cranial cavity, making a wound of exit in



WOUND OF BRAIN SUBSTANCE.

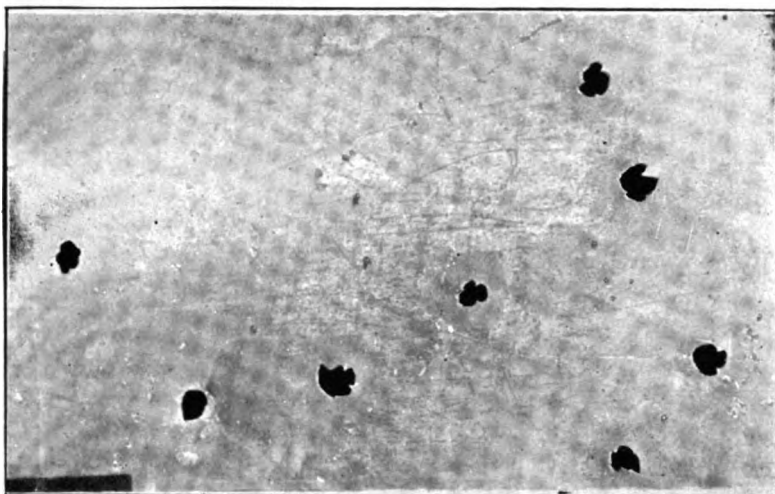
the lower portion of the occipital bone somewhat larger than the bullet and in the skin about the same size as the bullet. Fractures extended in several directions from the wound of exit and in fact this complete half of the skull was mutilated. This wound was one of unusual interest as will be noticed by the accompanying photograph.



FRACTURED WOUND OF EXIT IN SKULL.

In firing into twelve inch square tin cans filled with water, at a distance of 500 yards, I found that the Springfield rifle bullet would enter the can, expand its explosive force on the other three sides of the can other than the side of entrance, by bulging it, but would not come out on the opposite. I found that at the same distance the new rifle ball would penetrate the can completely, coming out on the opposite side, deforming the can most markedly, but the bullets in either case were not markedly deformed. In using the wet sand in the same size cans I got about the same amount of deformity of the can itself, due to the explosive quality of the balls but neither of them would penetrate. The steel plate as shown by the photograph was perforated by every one of the new bullets, that struck it a distance of 500 yards, but not so with the old gun. As seen by the photograph the perforations were each very much larger than the ball.

The firing into loose earth hillocks twenty to twenty-five inches at base, at all distances, only went to sustain the fact that a soldier could protect himself in ten minutes, with his bayonet, from bullets from the new gun as each and every one of them lodged in the picket hillock, no perforation taking place where there was twenty-four inches thickness. It is very easy to demonstrate, contrary to the ideas of Stiles and Brunner, (by actual field service) that the soldier in battles of the future, can protect himself most thoroughly from this most dreadful weapon.



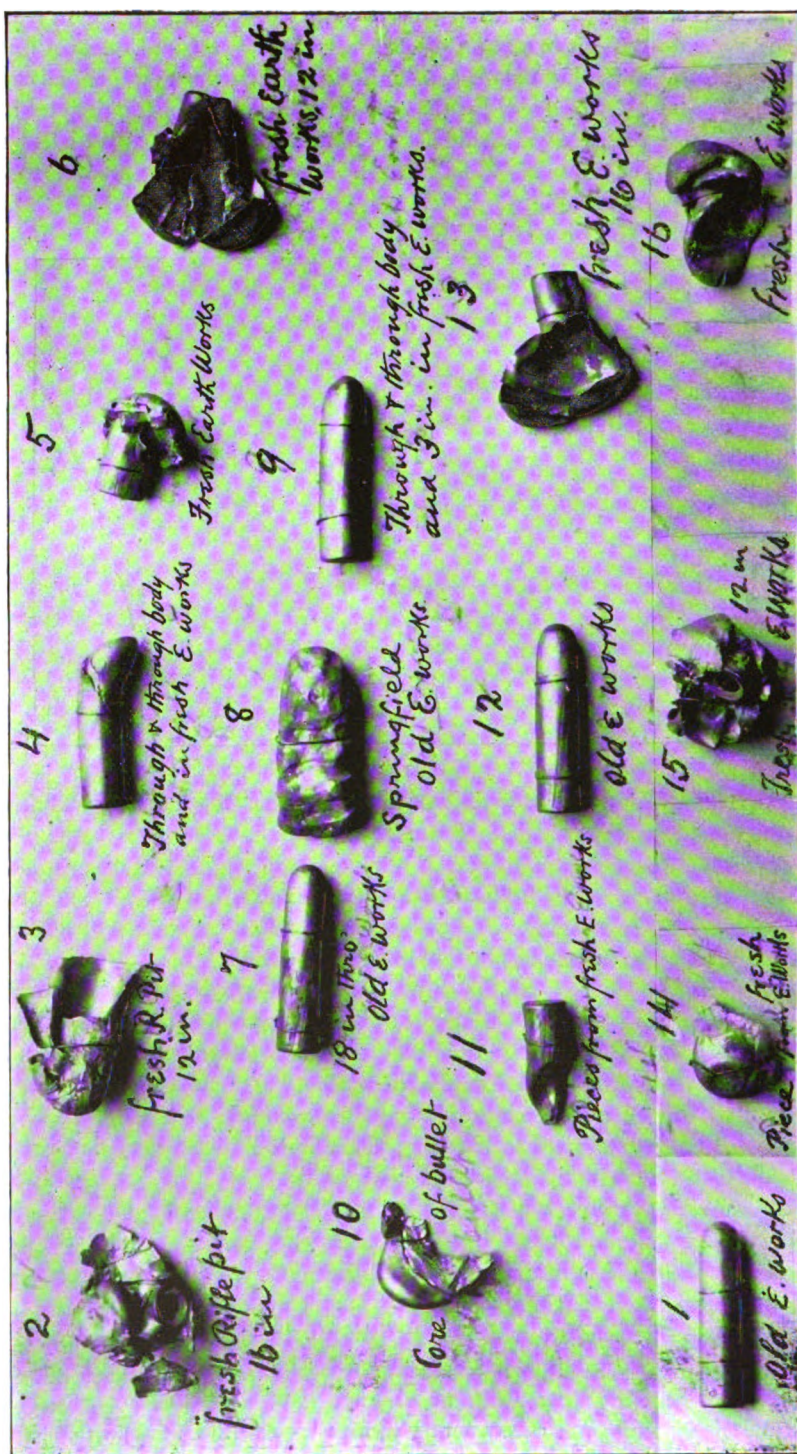
STEEL PLATES, 3-16 INCH PERFORATION.

Lieut. Sti'es, in a lengthy discussion before the 8th Cav. Lyceum, of S. Dakota, on the merits and demerits of the new gun, as compared with the old arm now in use, gives a very minute and accurate description of the wounds produced by the new bullet in all of the zones. In the 4th zone, (over 2000 yards) he says: "The new bullet loses a little of its favorable character, and extensive splintering and comminution again appear."

As regards the vital organs, he says that the heart if struck when its cavities are filled, will have the results of the explosive action of the bullets. *This I found most emphatically in the cadaver.* The lung tissue he states is never severely lacerated by the explosive action, but that the wound here bleeds profusely being a clean cut, and that the wound is extremely hard to find, being so small that it closes rapidly, hence it must be a very dangerous one to say the least. *This I found just the reverse.*

But in trying to prove the superiority of the new rifle, he endeavors to bring out facts concerning its use in actual warfare, to this end. He speaks of its *increased range and accuracy*, causing a battle to begin earlier and at a greater distance stating that the men will be longer under fire.

According to this writer one is led to believe that the rapid firing, the increased supply of ammunition, and the smokeless powder will all go for naught, as the men will begin firing at so much greater distance, that correct aim will be impossible, and consequently a large amount of ammunition will



only go to waste, such hits as are made being purely accidental. In future battles, armies will be as close as ever and no unusual amount of ammunition will be wasted.

It is also stated in Lt. Stiles' paper, that in Capt. LaGarde's report, of all shots striking bone under 200 yards, the German silver mantle was ruptured and separated from the bullet in ten per cent. This I did not find the case. Lt. Stiles, says: "I believe that Taylor Dowe would find his armor useless against such a ball! ! It is this lack of *homogeneity* in the bullet that enables the hard steel wire or plates in the jute body of his cuirass, to rupture the mantle of the *Manlicher* bullet and distort and overcome the velocity of the lead core, that the relatively thin layer of jute and metal are able to bring it to a standstill." No plate or protection can be worn by the soldiers against this bullet. He speaks of the dangers of ricochet hits, alleging that contact with *any hard substance* is certain to split the mantle. He declares that *brick or stone walls, field trenches, and earth works* are *pierced* at close range, and fire concentrated on particular points will produce regular breaches.

He thinks that inasmuch as the new ball will not lodge in the body under 1200 yards, (in the first and second zones) that there will be less need of surgical operations, especially upon the abdominal cavity; and yet he admits that there are likely to be many abdominal wounds, owing to the large proportional surface of the abdomen and even though he remarks of the dangers of this class of wounds. Our field surgeons will have to be on hand and at once, to save the wounded from the intense shock and severe hemorrhage. Dr. LaGarde in some of his most remarkably interesting and instructive experiments, speaks of the heat of the ball not being sufficient to sterilize it. I found quite a number of these balls after going through the body and into the solid earth behind, which when dug out could not be handled with any degree of comfort.

I think with Brunner, "Nobody will maintain that firing at close quarters, will be rare in future wars. In decisive struggles the opponents will often shoot at one another, at much less range than the short shooting distance of 500 meters. Fortified positions, farm houses, and villages, will often have to be carried by fighting at close quarters. Sudden nocturnal surprises will also not be wanting, especially in mountain warfare. Just imagine the effect of magazine fire, then, on closed columns! Owing to the tremendous penetrative power of the small bore bullets, cover will have to be used more extensively than hitherto."—*U. S. Service Gazette*.

I insert as a part of this report communications from Maj. Geo. Halley, Dr. H. E. Pearse, and Brig. Gen. Moore, in the order named, who aided me in the experiments named herein.

DR. J. D. GRIFFITH, City.

Sir:—The wounds that were made in the body by the new weapon at a 1000 yard range were first: In the bones; there were two of these I believe at this range. One in the condyle of the femur and one in the middle of the ulna. They were very different in character. The bullet evidently retained the position it was in when leaving the barrel of the gun. The hole made in the condyle of the femur was a smooth, clean cut, and very much such a hole

as would have been made by a drill or an auger. Bone was not shattered or splintered and the point of exit looked a good deal like the point of entrance. It was in all particulars an ideal wound. The wound in the ulna, however, was very different. The bone here was completely broken at the point where the ball went through, and reduced to fragments precisely as is done by the old gun. The point of exit was ragged and terribly torn, the bullet in passing through crushed the bone into numerous fragments.

The wounds made in the spleen, intestines, kidneys and heart were exactly similar to the wounds that I have seen made by the old style weapons. The spleen was torn up so that the wounded portion could have been made to lap half way around the arm. The end of the kidney was split open and mangled extensively. The wound in the heart was a very large ragged one, and would have been as destructive to life as any I have ever seen made by the old bullet.

The openings in the intestines were clean, sharp cuts, and would have allowed immediate extravasation of the contents of the alimentary canal. In this respect these wounds would have been more deadly than those made by the old bullet. These latter wounds were made at a distance of 500 and 350 yards respectively, the wound in the head was made, I believe, from the 350 yard range, the point of entrance was near the median line, of the forehead, and a little above the level of the roof of the orbit. The entrance opening in the bone was not very large, scarcely admitting the tip of the little finger. The point of exit, however, in the occipital bone was much larger and quite ragged, the fragments of bone being broken up and thrown out so that the aperture would admit the entrance of the point of the index finger readily. In a radiant manner from the point of exit, were a number of lines of fracture in the skull, some extending down into the base, others across the occipital bone, altogether, I believe, five distinct fractures. On removing the calvarium the substance of the hemispheres through which the bullet passed presented a good deal the same appearance the spleen did, fully carrying out the statements made by Mr. Victor Horsley, of London, who experimented extensively with these bullets. It was all in all quite as deadly a wound as would have been made by the old Springfield bullet.

The bullet while thus making exceedingly deadly wounds in the soft tissues, failed to penetrate any considerable depth of dry loose earth. If the object is to get a weapon, more deadly than the one now in use eminent success seems to have attended the effort. The bullet does not appear to have weight enough to carry it through loose earth.

A soldier will be practically safe behind an embankment of from thirty to thirty-six inches of loose earth, providing it was dry.

Respectfully submitted,

[Signed,] GEO. HALLEY,

Maj. Gen. 3rd Reg. M. N. G.

DR. J. D. GRIFFITH, City.

Sir:—I beg leave to submit a report of my observation regarding the effect of the shots fired by the new army rifle in the course of your experiments at Ft. Leavenworth, Kas., April 6th, 1895.

Regarding the perforation of the targets, the most noticeable thing, probably, was the uniformity with which the bullets from the new gun penetrated the various substances. I think that I am correct in stating that every bullet that struck the steel plate passed directly through it, while in the case of the leaden balls, penetration appeared to vary, some penetrating and others only denting.

The most remarkable fact was the small amount of damage done to the bullet itself in passing through substance other than steel; for instance in per-

forating the interrupted sand and wood targets which consisted of seven boards, each one inch in thickness and one and a half apart, and the interspaces packed with sand, making an aggregate of seven inches of wood, and about nine inches of sand, the bullets penetrated this without key-holing or deviating from their course, and made an opening of exit but little larger than that of entrance. A number of these were found after they had passed through the target, and careful comparison with one that had never been fired, failed to show any impairment of the integrity of the bullet. However, when the bullets struck the steel plate they did not perforate them with a small hole, but caused a large irregular opening very similar to that caused by the lead missile. This is perhaps due to the fact that the balls are badly broken up by their contact with the steel plate so that the hole, seems to have been made through the steel plate not by a conical steel bullet but by a mass of metal, resulting from the destruction of that bullet upon the face of the steel, and carried through the steel by its own momentum.

As to its effect upon the organic tissues I have the honor to state that I conducted post-mortems upon bodies, wounded by this gun, and a report of the same is found in the stenographer's field notes now in your possession. The only noticeable points aside from what are mentioned in this report are first, that when striking a capsulated organ, such as the brain, spleen, liver and kidneys, at a range of less than a thousand yards, terrible damage is done from the explosive quality of the bullet; second, wounds of exit made by the ball are almost universally the same size as wounds of entrance. This does not pertain to those occasional conditions in which fragments of tissue have been driven out, thereby enlarging the wound of exit.

While it is true that the ball penetrates almost every thing with which it comes in contact, deviating but slightly, not being deflected by curved surfaces of bone which it strikes, generally passing through a vessel rather than pushing it aside, I would call your attention to a certain wound of the wrist, (mentioned in the field notes) made at a range of 600 yards, in which the extensor tendons of the hand were not injured although the bullet passed between them, severing their sheaths and pushing the tendons aside.

Other points, perhaps not spoken of in the field notes, are the large amount of destruction of cancellated bone, and the absence of sound made by the bullets striking the human body. (This is especially noticeable as compared with the sound made by the bullets from the old Springfield rifle.) Third, the difficulty in locating the marksman by the report of this gun; the new rifle causes a sharp "crack" not nearly so easily located as the "bang" of the old Springfield rifle.

It was certainly my impression in watching the firing done April 6th, that the same marksman under the same unfavorable conditions, did very much better shooting with the new gun than with the old Springfield rifle with which they were more familiar. The greatest drawback in the rapid handling of the gun, seemed to lie, as suggested by Lt. Penrose, in the fact that the stock and trigger guard must be released by the right hand, in order to grasp the bolt which operates the ejector.

It would also be interesting to know whether this gun thus used in the rain, for the firing of nearly 400 rounds of ammunition, and being given only such care as the soldiers could give them in the field, would be in as good working order the next morning, as our present Springfield rifle under the same conditions. Submitting these notes for your kind consideration I have the honor to remain,

Very truly and sincerely yours,

[Signed,] H. E. PEARSE, M. D.

I may say here that the gun was clean and the barrel was perfectly bright the next day and absolutely no care taken of it.

DR. J. D. GRIFFITH, City.

Sir :—At the experiments made under your direction on the range at Ft. Leavenworth, Kas., September 1st, 1894, and April 6th, 1895, with the new Springfield—commonly known as the Krag-Jorgensen—rifle, I gave my attention wholly to the effect of missiles upon loose and compact earth and loose sand.

On the first named date the target employed was placed in front of a parapet that had been used as a butt by the troops at Ft. Leavenworth during the season of target practice of 1894 and before. Its face was thoroughly *ploughed* with rifle balls of large calibre, and as firing had been done when the earth was damp, the outer surface of the butt was to some extent broken into small lumps or clods and very dry.

Firing had been in progress for quite a time when one of your party, Dr. Pearce, discovered a ball in the dust on the face of the butt. This caused an examination for missiles which resulted in finding many; some were scarcely buried in the loose soil while others had penetrated but a few inches. As no measurements were taken the depth of penetration cannot be given exactly.

Firing was had at 350 and 500 yards. Balls fired at the distances last mentioned were recovered, and there seemed but little difference in the degrees of penetration of balls fired at the several distances mentioned. Of the missiles found some were flattened latterly, others bore traces of the rifling of the piece, while still others were unmarked. One was discovered with a part of the point cut out. I am satisfied that this missile had struck a nail in the scaffolding supporting the target.

A shallow excavation was made and the earth was thrown up in front to represent a hastily constructed rifle pit. The mound of earth so formed was of a diameter of twenty-five inches at its base. Five shots were fired at this at a distance of twenty-five paces. Three striking the top passed through, but two entering the mound near the base did not. The two bullets were not recovered, in fact not even examined for. None of us then knew the effect produced upon balls fired into loose earth at short distances.

The face of the parapet was cut down to damp and one shot fired at it, at a distance of twenty-five paces, which penetrated eighteen inches and was recovered uninjured.

On the 6th of April, the principal tests, as on September 1st, preceeding, were made upon a cadaver, but ten shots were fired at a hillock of loose, comparatively damp earth with a base thirty-four inches in diameter at a distance of 100 yards, also a like number of shots were fired at a hillock of loose Missouri river sand of same size and at the same distance. The entire ten shots fired into the mound of earth were recovered. All were practically torn into fragments; the penetration was eighteen inches and less. Of the shots fired at the sand hillock five were recovered, several having passed through near the top. The shells of two of these recovered were burst, the others flattened laterly to some extent, but not materially misshapen; the greatest penetration was about twenty inches. I use the term *about* for the reason that the sides of the mounds were sloping and the point of entrance of each separate missile, could not be definitely determined owing to the fact that the particles of sand moved upon slight agitation.

The tests of April 6th were made during a down-pour of rain, and for that reason were not as thorough as might have been under more favorable circumstances.

Why loose earth should be more destructive to the missiles fired from the new rifle, than loose sand I am unable to assign a reason. The subject is one

of great interest and I should be glad to witness further experimentation, upon loose and compact earth.

Judging, however, from the tests above referred to, I am of the opinion, that twenty-five inches of loose dry earth, and thirty inches of loose damp earth, will afford adequate protection to the soldier against the missiles of the new rifle fired at a distance greater than twenty-five yards.

Very respectfully.

[Signed,] MILTON MOORE,
Brig. Gen. M. N. G.

CONCLUSIONS.

- 1st. Battles of the future will not be fought at artilleristic range.
- 2nd. Any soldier can protect himself by the use of his bayonet as a pick.
- 3rd. The best protection is loose dry earth; the next best loose sand.
- 4th. At distances up to 1000 yards the explosive quality of the missile is terrific.
- 5th. This explosive quality is most marked in soft tissues and cavities,—the brain and lung tissues are terribly torn and the heart burst.
- 6th. When a viscus is grazed by a bullet it is much mutilated.
- 7th. Vessels are cut, not torn; hence death rate on the field will be very great. Four killed to one wounded (probably).
- 8th. Tendons are the only tissues in the body which seemed to be turned aside by the ball.

COMMUNICATIONS.

NORTH MISSOURI MEDICAL ASSOCIATION.

DEAR DOCTOR:—The third annual meeting of the North Missouri Medical Association will be held at Moberly, Mo., June 20th and 21st, 1895.

The two previous meetings, judging from attendance and papers, were second only to the state society, in point of enjoyment and profit, while many said that they derived more satisfaction from it than the state association afforded.

The papers at the last meeting were so numerous and interesting and discussion was so enthusiastic that many papers, for lack of time, were left unread.

Program and detail of arrangements will be mailed to you about June 15.

Titles of papers should be in the hands of the Corresponding Secretary by June 15th to insure insertion in the printed program.

Let us have from you the favor of the title of a paper, and any suggestions for the good of the society.

Hamilton, Mo.

E. VAN NOTE,
Cor. Sec'y.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

DEAR DOCTOR:—The twenty-first annual meeting of the Mississippi Valley Medical Association will occur in Detroit, Mich., September 3rd, 4th, 5th and 6th, 1895. This Association is now in a more prosperous condition than ever before. The membership list shows a large increase annually, and

the character of the scientific work accomplished at each meeting is of the very highest. The officers and committee of arrangements are working unceasingly for the success of the Detroit meeting, and, although early, indications are that a meeting of unusual size and interest will be held in September. The profession of Detroit, are united in their efforts to have the gathering in their city outshine all previous ones. The social feature of the meeting will leave nothing to be desired in that direction.

A meeting of the officers, committee of arrangements and auxillary executive committee was held in St. Louis in April. The prominent railroads were all represented at this meeting, and the railroad officials present promised a united effort to obtain a half-fare rate to Detroit.

It was decided to make the annual addresses a special feature of the meeting. September was chosen as the time of the meeting for two reasons, First, because the medical colleges will not have opened, and opportunity will thus be given those connected with these institutions to be present; second, because this is the most delightful time of the year in which to visit the beautiful city of Detroit.

A cordial invitation is hereby extended to you by the executive to be present. Titles of papers should be presented to the Secretary as early as possible.

Fraternally,

FREDERICK C. WOODBURN,

Secretary.

Indianapolis, June 1, 1895.

EDITORIAL.

THE HOT SPRINGS OF OUR WESTERN MOUNTAINS.

GLENWOOD SPRINGS, COLORADO; LAS VEGAS, NEW MEXICO.

The chain of descriptive writing devoted to our American health resorts found at the hot springs of our western mountains has brought many complimentary letters to the INDEX. The great Hot Springs, of Arkansas—famed the world over, and its newer rival of the Black Hills, the Hot Springs, of South Dakota, were described in previous numbers. Glenwood Springs “in the heart of the Rockies” must receive its share of attention ere the chain could be complete. A fairly long, yet a delightful ride takes one there,—a Santa Fe train to Colorado Springs,—two hours for rest and a stroll about this beautiful city of sunshine and perfect climate, and your train over the Colorado Midland, the finest scenic line of the world, starts for Glenwood Springs through scenery that one will remember as long as memory remains. A ride of ten hours brings the traveler to Glenwood. The location is truly “In the heart of the Rockies” as its inhabitants state. It lies at the junction of Roaring Fork and Grand river in a pretty valley with towering hills, timber clad to their summits, on all sides. The hot springs are of great heat (132°) and volume,—a discharge of 800 gallons per minute being measured as the outpouring of ten of the largest. The largest one was once upon an island, but the island has been converted into a part of the mainland and in the channel of the river (now vacated) lie the great out-door bathing pools which give Glenwood its reputation. The upper pool covers about one and

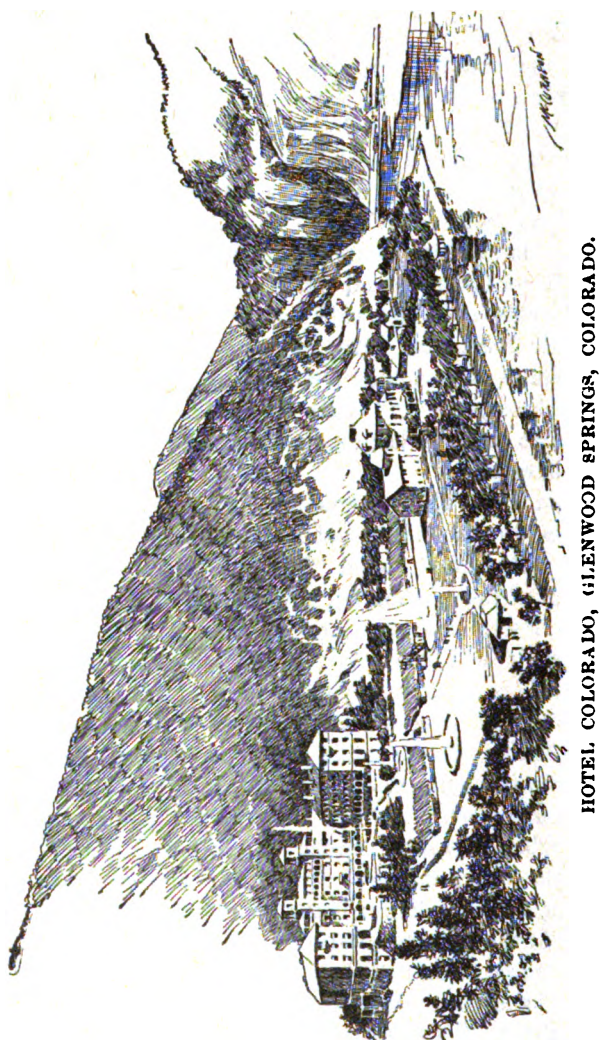
one-half acres and varies from three and one-half to six feet in depth. It is an out-door pool, the bath house over hanging the edge and the dressing rooms always warm. There in summer and winter alike one sees the bathers, victims of the various complaints for which hot mineral springs have become famous, bathing in the warm saline water. One cannot bear the heat of the water at the upper end of the pool; toward the middle, the water is quite comfortable and at the lower end springs a fountain of clear cold mountain water, giving a temperature that would delight a mountain trout with its coldness.

The writer well remembers how, suffering from an acute tonsilitis, with fever and the pain lancinating in its character, he accepted the advice of the landlord of the Hotel Colorado and with fear and trembling sought the pool. For a moment he shivered in the cold air, and the next brought the delicious sense of relief as the hot saline water gave its comforting relaxation. Closer and closer he swam to the steaming hot inlet, until, at a temperature of severe heat he lay with throat, ears and head under water, just floating. The relief was so marked as to make a lasting impression upon the experimenter, of a most favorable character.

Nature has added to the wonders of the hot springs at Glenwood a series of great fissures in the bluffs above the city known as "steam caves," which are filled with heated steam. The natural Russian bath thus afforded will, so the miners of the neighboring gulches aver, cure rheumatism in a very few days. Many resort there and are cured by the moist medicated steam, and in future years it will be one of the glories of America that will make a name for Glenwood greater than any other one of its attractions.

In approaching Glenwood one sees on every hand the rude improvements of the mountain settler—the log cabin—the rough-sawed, board shanties—the "dug out" in the hillside. One stops at Thomasville for supper a short time before reaching Glenwood and is ushered into a fine specimen of log-cabin architecture and treated to a substantial meal served in good old fashioned dishes, and as the sigh of the pine trees at the door and the music of Frying Pan creek comes to ones ears, and one glances at the rough pine logs around about, one realizes that he is in the mountains sure enough. (By-the-by should you meet the owner of the "supper station," Capt. Noble by name, cultivate his acquaintance, for a surer hand for a rifle and a keener eye for game cannot be found in Frying Pan gulch.) But in two short hours, lo! all changes. Glenwood is reached and one steps out under the glare of electric lights and enters the spacious halls of the Hotel Colorado, as fine a hotel as money and modern scientific appliances can create. The appointments are simply perfect and at night the merry dancers, the open fires in the halls, the fine music and the brilliant light might lead one to think himself in New York did not an occasional group in mountain dress catch the eye, or the breezy talk of trout fishing or deer hunting drift from some group. Another group gathered in a warmer corner will be discussing the beneficial results wrought by the healing waters and the clear bracing air of Glenwood. The groups will be evenly divided for about as many of the well come here for pleasure as of the sick for cure, and all find what they come for. As at other points one can find ex-

cellent rooms and board among the private residences and hotels of varying price and attractiveness, but the water is free—the baths are a nominal price and



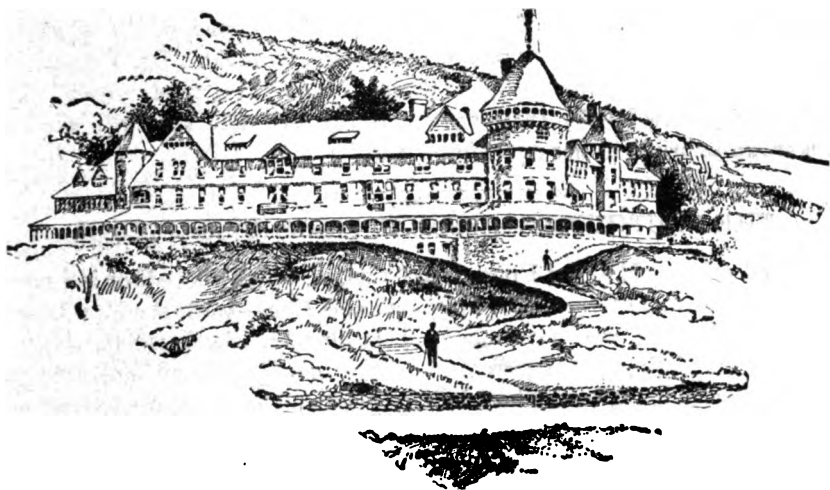
HOTEL COLORADO, GLENWOOD SPRINGS, COLORADO.

the clear glorious air that marks our Rocky mountains is forever in the lungs. The elevation, 5200 feet, makes it a desirable sanitarium at all seasons.

LAS VEGAS HOT SPRINGS.

The Hotel Montezuma is open and Las Vegas Hot Springs are in successful operation, all stories to the contrary. That is the giving of baths and the care of patients is in successful operation, for the hot springs themselves are probably doing the same amount of operating as far as turning out huge volumes of hot water is concerned that they were several thousands of years ago and it makes no difference in the matter whether "men may come and men may go" or not, they "go on forever" just the same. The springs boil

out from the hill side some six miles northwest from the old city of Las Vegas, about forty-two in number, some ice cold but most of them between 110° and 140° F. temperature. It is here at the Springs not at the city, that the Montezuma Hotel has been built. During the financial depression of 1893 it was closed for a time but was soon re-opened and will remain open. The Montezuma is a perpetual surprise and delight to visitors, no matter what they may



HOTEL MONTEZUMA, LAS VEGAS HOT SPRINGS, N. M.

have been led to expect before going to the Springs, for it is not easy to believe in the actual existence of a hotel so extensive and magnificent, so complete and modern in every particular, nestled against the side of a cañon far from the accustomed home of lavish expenditure.

There is ample accommodation for hundreds in its numerous apartments, abundant room for a multitude on its spacious sunny verandas. The baths are close at hand, with every facility and every modern method of application under the direction of specially trained attendants.

Las Vegas is situated in the mountains of New Mexico, at an elevation of 6,767 feet above sea-level, where the sunshine is constant and the coolness and purity of the air are always invigorating.

"One hundred and eighty-seven days of unclouded sky, one hundred and thirty-nine days when sunshine predominates, and thirty-nine cloudy days make up the average year in New Mexico, while the record of five years' observations at Las Vegas Hot Springs gives the following mean temperature:

January 41.0, February 49.0, March 56.0, April 58.0, May 61.4, June 71.4, July 74.0, August 71.9, September 65.0, October 55.4, November 53.7, December 52.0, or a mean annual temperature of 59.07. What this record cannot communicate is the fact that the citizen of New Mexico has his cold winter weather at night, when he sits by the fire or lies in bed under an extra blanket; while by day he hardly knows the use of an overcoat. It does not communicate the fact that in midsummer the blanket is still in demand, but the heat of noonday is never distressful."

The Springs themselves, of the class known as alkaline-saline, possess the alterative value so well known in these hot mineral waters and is recommended for rheumatism, and allied troubles, and the various glandular, scrofulous and specific troubles that show themselves by a tendency to glandular enlargement and tissue change. The Santa Fe Railroad has a hospital here. The National Sanitarium has lately been opened and many are finding health in the combination of climate and medicinal waters which are found here. One has difficulty in writing of the virtue of the hot springs alone when the climate of New Mexico so prominently enters the field. Dr. Francis W. Gallagher, writing in the *Medical Record*, March 7th, 1894, says: "The possibilities of New Mexico are largely unrecognized and time will win for her a crown as bright as her never failing sun."

THE SOUTHWEST MISSOURI PRESS ASSOCIATION.

The Southwest Missouri Press Association, of which the editor is a member, met at Mountain Grove, Mo., May 17th and 18th,—while the May INDEX was in press. There were over 60 members present, who certainly enjoyed themselves exceedingly. We were furnished most excellent music by the Mountain Grove band, entertained by a company of local talent who rendered the play written by editor Glenn of the Mountain Grove *Tribune*, and called the "Missouri Editor," on the evening of the 19th, and after the play we were tendered a banquet by the ladies of Mountain Grove. This was an aggregation of good things that would bring a smile to any editor's countenance.

On the morning of the 19th the editors and their wives were taken for a carriage drive among the beautiful hills and orchards that surround the city. One orchard in particular, the property of Dr. Lane, a physician of Mountain Grove, is worthy of note. It contains eleven thousand bearing trees and its owner recently refused \$7,000.00 for his prospect of fruit for this year. Hundreds of smaller orchards surround the city which is on the highest point of the Ozark Mountains on the line of the Kansas City, Fort Scott and Memphis, R. R., and lies in the center of the greatest fruit belt in the world.

The work of the meeting was accomplished to the entire satisfaction of all and occupied two days. The old officers were re-elected and Windsor, Mo., chosen as the next meeting place. The Association took an excursion to Hot Springs, South Dakota, at the close of the session, a description of which place was given in the April number of the INDEX.

The cordial hospitality of the people of Mountain Grove will ever be remembered. Their beautiful city has earned its laurels by the work of the hands of its inhabitants; and as the industry of the men have gained for it the title of the "Land of the Big Red Apple," so should it, by virtue of the flowers planted everywhere by the ladies of the households, receive the added name of "The Home of the Big Red Rose." The roses were banked every where; in door yards, on our banquet table, and in our meeting hall. The INDEX will always be proud to say a good word for Mountain Grove. It is a gem of a city and an ideal home.

OUR NEW CITY HOSPITAL BUILDING.

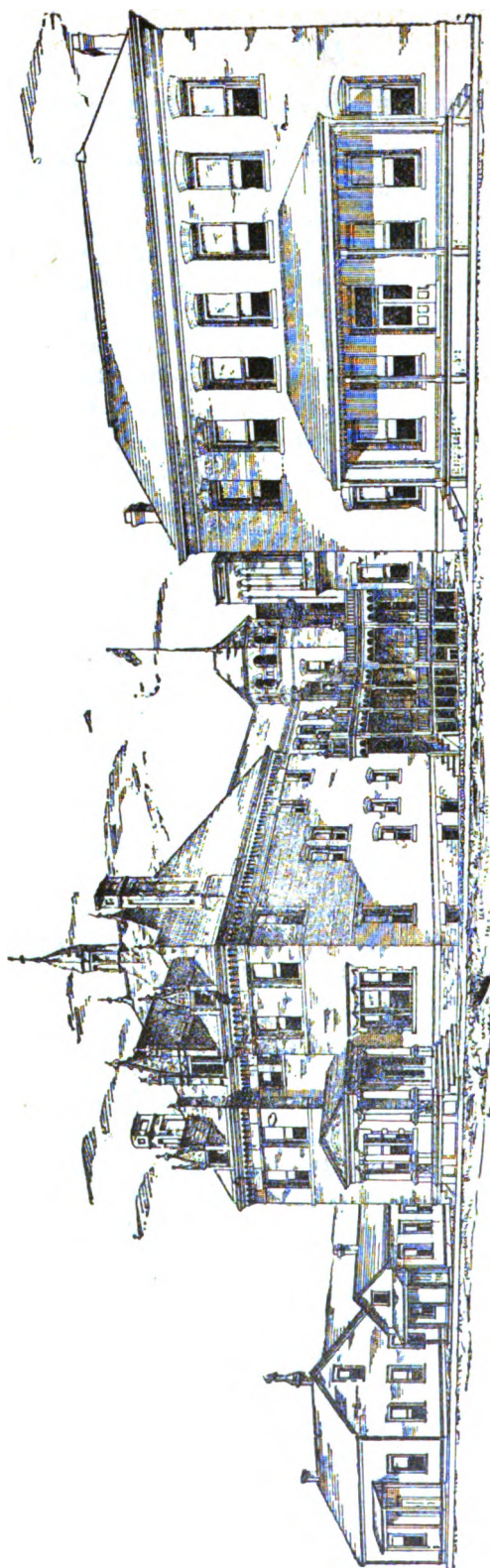
The general spirit of improvement that has taken possession of Kansas City is manifest also in the Health Department. As told in the May INDEX the new City Hospital is already assured, the plans completed and the excavation made for the foundations. We are indebted to the *Kansas City Journal* for the line cut of the new building which appears in this issue and which gives an idea of what the appearance of the structure will be. The plans show a great improvement over the present buildings in the attention paid to sanitary construction and comfort of patients and staff.

The Hospital grounds comprise a hill sloping toward Locust Street on the West and 20th Street on the North and contain several acres. At the top of the hill stand the present buildings, capable of accommodating one hundred patients. One building, a one-story frame known as old D ward has been moved away and in its place is to be erected a handsome brick and stone structure facing west and joining with the old operating room at the southwest corner of the present main building. A roomy court will be enclosed and wide, cool porches will surround it. The basement of the new building will contain the kitchen, of ample size and fitted with all modern conveniences for economical and healthful cooking, numerous store-rooms and pantries and three dining rooms; one for the staff, one for male patients and one for female patients. The woman's dining room is about 26x32 feet in size and the men's dining room about 26x50 feet, while that for the staff though smaller is of ample size. All are arranged with a view to convenience of the cooks and servants and comfort of those patients whose condition will permit them to attend meals in the dining rooms.

The first floor will contain the dining room, the resident surgeon's office, the offices of the assistants, a room for insane patients, two large wards, one of fourteen and one of twenty-four beds, and opening off the wards will be closets, baths, and a detached room for patients that are in a moribund condition; such will not be allowed to die in a ward bed among other patients. Similar wards and rooms will occupy the second floor, commodious rooms are furnished which may be used for convalescents and the wards open out on broad pleasant porches.

The new building will accommodate about eighty patients and the old buildings will be so repaired and improved as to contain about one hundred and ten beds, making an aggregate accommodation of one hundred and ninety beds.

The stoves and furnaces now in the old buildings are to be removed and the whole heated by steam, furnished from a boiler room some 80 feet distant from the main buildings. The arrangement of heating pipes will be overhead, thus avoiding the heat near beds and insuring more even heat and better ventilation. The present building will be re-furnished and hot and cold water and proper bath facilities added. The old frame known as "D" ward has been moved to a point some distance south of the site of the boiler room and will be used for a reading room and lodging room for employed help.



Confession Ward

Men's Ward

New Building

K.C. Hospital Building. Showing Proposed Improvements.
NEW CITY HOSPITAL, KANSAS CITY, MO.

Old Building and Men's Ward

This arrangement gives the city about 80 to 90 per cent. more room, a great improvement in the condition of the room formerly at the command of the city physician and leaves a very large amount of ground vacant for future buildings when needed.

To City Physician, Geo. O. Coffin, M. D., is due much of the credit for bringing to pass this most desirable improvement in our appliances for the care of those unfortunates whom fate or misfortune has made wards of the city.

EDITORIAL NOTES.

CONSTIPATION IN NURSING BABIES.—This troublesome disorder is generally due to a lack of fat and milk sugar in the food. If a few grains of milk sugar be given to the babe at each feeding and a dose of 10 to 30 drops of codliver oil administered three to four times a day it will be relieved. Drugs should be avoided. If the codliver oil is not at hand a few teaspoonfuls of pure cream is an excellent substitute. Gentle massage of the abdomen is an excellent assistant.

A CASE OF VENTRAL HERNIA IN THE LINEA ALBA.—The *Annals of Surgery* for April contains a most interesting article upon the subject of "Hernia in the Linea Alba" in which a case of obscure gastric pain was traced to hernia and cured by operation upon the hernia. Dr. B. B. Davis reported the case which had been under treatment since 1887. The symptoms were recurrent pain, vomiting, great nervousness, cardiac depression, and usually a temperature one or two degrees above normal. The injection of even a teaspoonful of water would cause increased, even intense pain and vomiting. Nothing gave relief except morphine hypodermically. The attacks, as a rule, lasted from three days to one week when they disappeared as if by magic and the attending physician would be forced to the opinion that the prompt convalescence was in spite of rather than because of his administrations. Finally the patient, having been informed that whiskey drinking caused his trouble and having taken the "Keely cure" without relief either to the pain or the desire for stimulants which the pain was causing, came to the conclusion that he had cancer of the stomach. A small tumor with the characteristic of a hernia and which the patient stated had been there many years was found in the linea alba one and one-half inches below the ziphoid cartilage. An incision revealed the fact that the hernial sac contained adherent omentum which continued in the form of a band to the greater curvature of the stomach. The division of this band, the excision of the sac, and the closure of the opening resulted in a complete cure of all painful symptoms.

LITERATURE UPON HERNIA.—The April number of the *Annals of Surgery*, is especially rich in the study of hernia, having a twenty-three page article by Gregg Smith, M. D., on "Parietal Incision in Abdominal Surgery;" fifty pages by William B. Cooley, M. D., of New York, on the "Treatment of Hernia by Operation, with report of two hundred cases;" an exceedingly interesting article by William Barton DeGano, M. D., of New York, on "A Study of Thirty-nine Cases of Strangulated Hernia," and the article mentioned elsewhere on "Hernia in the Linea Alba." From reading these articles one is led to the conclusion that operation for the radical cure of hernia is to be considered in most cases as a certain means of cure; as young children can generally be cured by mechanical treatment, *i. e.*, the truss. Operative interference should therefore be urged only when the child cannot wear the truss, or the hernia is not securely held by it. Operation should not be advised in patients over fifty, unless there are the strongest reasons for it. Large ventral and umbilical hernia occurring in

stout women, with a very thick layer of subcutaneous fat are unfavorable cases and the risk to life from operation is great and many relapses of the hernia occur. They are best treated by support. Women under forty, in good health, with hernia of moderate size, should be cured by operation. Umbilical hernia in children can be cured without operation in most cases. Those not so cured can be cured by operation later.

Femoral hernia is always to be operated on as no truss can be applied satisfactorily and the results are even better than those of inguinal hernia.

The author discards silk, silver wire, and silkworm gut for sutures, as they are a foreign body and however aseptic, the tissues have a tendency to throw them off. He uses chromicised catgut and kangaroo tendon. The operation preferred is that of Bassini or of Halstead. The details of 200 cases are given in support of his views.

THE PREPARATION OF ASEPTIC CATGUT BY MEANS OF FORMALIN.—Dr. R. H. Cunningham writes in the *New York Medical Journal* of April 20th, 1895, a very interesting article. He says: "If commercial surgical catgut is wound not too tightly on a glass spool and soaked for two days in a mixture of absolute alcohol and ether (equal parts of each) to thoroughly remove the grease, then rinsed in alcohol for a few moments, and from this removed to a small jar that has a tightly fitting cover and which contains enough of a mixture of equal parts of formalin and alcohol to well submerge the catgut, after several days the catgut may be removed and the formalin washed out by soaking it several times in fresh alcohol, or, what I consider more preferable, it may be transferred to normal saline solution and *boiled* for half an hour or more and then be transferred to alcohol and preserved therein as is usually done.

When catgut has been treated with this alcohol-formalin mixture a very peculiar change as regards some of its properties will be found to have occurred. It does not become stiff or brittle, and even after boiling in water for some hours it loses practically none of its former strength, nor does it disintegrate in boiling water as is the case with catgut prepared by the methods generally in vogue.

The fact that it can be boiled without destroying it is very important for a number of reasons, but the three given below will suffice for present purposes.

It facilitates the complete removal of the irritating formalin from the catgut, as both formalin and alcohol are readily soluble in water.

Secondly, a more aseptic state of the gut is produced by the antiseptic properties of the formalin.

Lastly, it becomes still more surely aseptic as well as non-irritating from boiling in normal saline solution into which the spool of catgut can be put just at the beginning of a surgical operation and in this way avoid bringing alcohol, oil of juniper, etc., in contact with delicate membranes and other tissues.

The advantages gained from the employment of animal ligatures and sutures rendered *positively* aseptic by this method are obvious, so that further dissertation thereon is needless.

CHILLS AS A DIAGNOSTIC SIGN, AND ERRORS OF DIAGNOSIS.—Prof. Wm. Osler is quoted in the *Medical Standard* as saying that chills are of two varieties. First, the nervous chill, from sudden shock to the nervous system. Second, chill from absorption of the toxic material formed by organisms. The second group always has fever present. He says, "These are the two special features of the malarial chill. Within forty-eight hours the chill will cease in genuine malaria if quinine be used. On the other hand if paroxysms continue under its use malaria may be excluded, except in a few cases of autumnal malarial fevers which may resist quinine for a few days, but these have not the character of ordinary intermittents. I have never met with a case of true malarial fever which quinine did not stop.

Chills may cause errors in diagnosis in various affections. In tuberculosis, the error may be made early or late in the disease, for it is at the two extremes of pulmonary tuberculosis that we have chills. These are a special feature of the early stages

of tuberculosis. I have seen many cases of early phthisis diagnosed as malarial fever. Errors occur frequently in regions where paludism is common. There is the large group of septic processes with fever, such as abscess of the liver, which is a common cause of chills and fever in this latitude. There are very few cases of abscess of the liver which are not at first regarded as malarial fever and thus much valuable time is lost in the treatment. Malignant endocarditis is another disease ushered in by chills and often treated as malaria. A not frequent source of error is the chill following and associated with tuberculous pleurisy and from empyema following the infectious diseases, as scarlet fever, etc., and following the formation of pus. The chills in typhoid fever have attracted attention for years. They occur in 2 or 3 per cent. of all cases. Very often the chill is due to very powerful antipyretics. I have seen a case in which chills and fever had followed a large dose of acetanilid. In certain urinary affections, and more especially pyelitis, chills occur which are often obscure. In chronic obstruction of the common duct by gall-stones there is the condition called by Charcot hepatic intermittent fever, due to catarrhal cholangitis. In new growths of various kinds, as in cancer of the stomach, Hodgkin's disease, and lastly in syphilis, errors in the fever may be made. The important points in diagnosis are in the effects of quinine and the examination of the blood.

BISMUTH SUBGALLATE FOR GASTRIC CATARRH.—Dr. G. Ray Hoff, of Denver, reports in the *Medical World*, some excellent results from the use of bismuth subgallate, in dyspepsia. His case was a man fifty-one years of age, suffering from acute dyspepsia, of the kind that is relieved by eating but would occur again after about two hours. While the doctor does not make a diagnosis we are confident that his case was one of the gastric neuroses, an error of secretion, and characterized by excessive secretion of hydrochloric acid, a condition known as hyperchlohydria. Patients suffering from this trouble, suffer from delayed pains coming on several hours after eating. The pains waken them at night, and are generally relieved by taking food which absorbs the fluid and the acid, or by attacks of vomiting. Gastric ulcer often accompanies this trouble.

The doctor describes his case and treatment as follows: "He was constantly hungry, and after eating would feel a little relief for about two hours. But then his sufferings would begin again, severe pains radiating over the entire abdomen. On palpation I found a sensitive spot over the pyloric end of the stomach; no evidence of a tumor, however. At night he would be hungry and distressed, as during the day. He would have milk by his bedside, taking about half a glass every three hours. Vomiting was not a prominent symptom, although he would vomit occasionally, black masses resembling coffee grounds, and usually two hours after eating. He had frequent sour eructations. I believe this form of dyspepsia usually results from excessive mental labor and exhaustion of nerve force.

I began treatment by giving two five-grain tablets of Wyeth's bismuth subgallate, and ten grains of soda bicarb. after each meal, and discontinued the use of the stomach tube. I saw the patient three days later, and he had not improved. A week afterwards I saw him a little better; two weeks afterwards all symptoms had disappeared. He did not assist the treatment by a careful diet, but seemed to eat everything. After four months' treatment he was apparently without a symptom; the abnormal appetite had also left; so I discontinued treatment.

A very remarkable thing was that, after improvement began he was not troubled with a relapse, nor has he been since treatment has been stopped, and that is over seven months ago. I saw him the other day, and he said that he weighed 198 pounds."

The *Philadelphia Polyclinic* says that "In prescribing for cases of ivy poisoning, Dr. Cantrell advised the use of Laborraque's solution (liquor sodæ chloratæ), either in full strength or diluted one-half, according to the case; remarking at the same time that the remedy would give the desired result in from four to five days."

THE SONG OF THE GENERAL PRACTITIONER.

[Sung at the Annual Dinner of the Bolton and District Medical Society.]

He must not walk his rounds for fear his patients think him poor,
And dearly do they love to see a carriage at their door;
And if his horse is fat, "He must have little work to do,"
And if it's lean, the reason is, "He starves the poor old screw."

Should he call upon his patients every day when they are ill,
His motive plainly is, "to make a great big doctor's bill;"
If he visits them less frequently,—thus less'ning their expense,—
The chaunces are he'll be accused of willful negligence.

He must work all day and half the night, and never say he's tired;
For the public look upon him simply as a servant hired.
And should he take a holiday, he'll find when he comes back,
Some patients have resented it by giving him "the sack."

Concerning money, he must seem indifferent to be.
And folks will think he practices from pure philanthropy.
When we hear boasting him about of the guinea that he earns,
We wonder if they all appear in his income tax returns.

About his own afflictions he must never say a word;
The notion of a doctor being ill is so absurd!
And when, perhaps from over work, he's laid upon the shelf,
His sympathizing patients say, "Physician, heal thyself!"

J. JOHNSTON, M. D., in *Lancet*.

BOOK TALK.

Books reviewed in these columns may be obtained of Dr. A. M. Wilson, rooms 412
414 New Ridge Building, Kansas City, Mo. Discounts where possible.

TEXT-BOOK OF HYGIENE.

Text-Book of Hygiene: A Comprehensive Treatise on the Principles and Practice of Preventive Medicine from an American Stand-point. By George H. Rohé, M. D., Professor of Therapeutics, Hygiene, and Mental Diseases in the College of Physicians and Surgeons, Baltimore; Superintendent of the Maryland Hospital for the Insane; Member of the American Public Health Association; Foreign Associate of the Société d'Hygiène, etc. Third edition, thoroughly revised and largely rewritten with many illustrations and valuable tables. Royal octavo, 553 pages. Cloth, \$3.00 net. Philadelphia: The F. A. Davis Co., publishers, 1914 and 1916 Cherry St.

This work assumes an added importance with the present tendency to hold the physician accountable for the prevention as well as the cure of disease. The subject of hygiene is one moreover of increasing interest and importance; so much so that many of our colleges have established chairs on the subject. The present (third) edition is a timely and an excellent one as would be expected from its gifted author.

The opening chapters occupying one third of the book are upon air, water, food and soil, and consider these subjects in relation to the health and life and welfare of the individual. The spread of epidemic and endemic diseases is considered, as effected by the above agents. The removal of sewage is thoroughly discussed, the various forms of water closets, earth, and ash closets, and "pan closets," such as are used in most of the homes of smaller English towns receive attention. The pneumatic system of Llernur, in place of water flushing, as used in Holland for the emptying of sewers is also considered. Discussion upon the construction and care of homes, prisons, hospitals, schools, ships and army camps, with a view to promoting the health of inmates, covers many valuable pages. Recent agitation upon quarantine practice has been noted and the chapter on this topic rewritten and brought up to date.

Well-written chapters are included upon baths and bathing, disposal of the dead, contagion and infection, antiseptics, deoderants and disinfectants, the examination of air, water and food, etc. At the close of each chapter, to facilitate review and study, a full set of questions has been appended upon the topics of the chapter. The whole is well and fully indexed for reference.

THE TREATMENT OF WOUNDS, ULCERS AND ABSCESES.

The Treatment of Wounds, Ulcers and Abscesses. By W. Watson Cheyne, M. B., F. R. S., F. R. C. S., Professor of Surgery in King's College, London. In one 12mo. volume of 307 pages. Cloth, \$1.25. Philadelphia: Lea Brothers & Co. 1895.

This little work owes its brevity and its widespread usefulness to the fact that it is devoted wholly to the treatment of affections which, though nominally surgical, are yet so common as to form part of the daily work of every practitioner. Antiseptic methods have revolutionized surgical procedures and have added vastly to their success. Moreover by throwing light upon formerly unexplained failures they have increased not only the knowledge but also the confidence of the surgeon, an element which must be recognized as having an important influence upon results. Prof. Cheyne has long been known as one of the foremost of London surgeons, and as a critical student of antiseptic procedures in their practical bearings. In this volume he has described the methods of treatment which he employs and which he knows to be efficient and to be the simplest consistent with certainty in results.

The chapters on wounds of the mouth, infectious ulcers, and the management and cure of all varieties of fistula are especially interesting. The price has been made low (\$1.25) and the book should have a large sale.

INDEX OF MEDICINE.

Index of Medicine. By Seymour Taylor, M. D., Member Royal College of Physicians, Senior Assistant Physician to the West London Hospital. In one large 12mo. volume of 801 pages, with 35 engravings. Cloth \$3.75. Philadelphia: Lea Brothers & Co. 1895.

The author has prepared a work of great value alike to physicians and students. In a certain sense the name "Index" is a misnomer, for the volume is in fact a concise "Practice of Medicine," the diseases being grouped systematically in order to secure for the reader the many advantages resulting from rational arrangement. After valuable chapters on "Disease," "General Pathology," "General Diseases," "Specific Infectious Diseases" and "Specific Fevers" the various organs and systems of the body are considered, and the cause, symptoms, pathology, treatment and prognosis of each affection are succinctly stated. Numerous illustrations, together with tabulations of differential diagnosis, tests, etc., elucidate the text and condense a great amount of necessary knowledge in the clearest manner, thus making it a book of more than ordinary value for "case reading" and the ready and quick reference necessary in busy practice. As is usual with books of recent date much space is given to diseases of the nervous system and a good classification and clear definition furnished. The chapter on myxoedema is a very clear one, and that upon goitre, while painfully brief, is also clear and good.

MEDICAL GYNÆCOLOGY.

Medical Gynæcology. By J. C. Skene, M. D., Professor of Gynecology Long Island College Hospital. Formerly Professor of Gynecology New York Post-Graduate Medical College, etc., etc. In one large volume, 8vo., 590 pages with illustrations. Cloth, price, \$5.00. 1895. D. Appleton & Co., Kansas City and New York.

In a previous number of the INDEX we have called attention to this volume. Gynæcology has been for some years drifting into the surgeon's hands and has even

been considered a branch of surgery. The present volume discusses only the medical aspect of that science. Much most interesting matter appears in chapters devoted to general subjects, viz: the characteristics of sex, and the function and peculiarities of each, etc. Sexual matters are handled without gloves in many passages, and the consequence will be a better understanding of many subjects connected with sexual incompetency and incompatibility.

Questions of inflammation are well studied and the remedies adapted to the treatment of such cases are carefully studied. The writer's ability in this line leads us to expect just such a careful consideration as is here presented. Where the symptoms are due to a septic focus that can be located in tubes, uterus or peritoneum, the author recommends that the case be at once turned over to the surgeon. Much attention is given to general measures,—personal hygiene, exercise, muscular training, mental therapeutics, diet and massage. Neurasthenia, sex in relation to insanity, and unnatural habits are the subjects for valuable chapters. In the question of cancer, the benefits of various medicines are discussed and nothing is said that can be called valuable as to therapeutics of carcinoma. In its treatment the physician is only concerned in helping the surgeon by putting the patient in the best possible condition or in administering opium to relieve the pains of the late stages of the disease. As to the treatment by local pastes and plasters, the author dismisses the subject by saying "This of course, is surgical treatment and the most barbarous kind of surgery, and so nothing further need be said on the topic."

Fibroid tumors are classified as fit subjects for surgical or medical treatment owing to conditions. The grounds for medical treatment of fibroid tumors are, 1st, that the sufferings and dangers in many cases are not sufficiently severe to call for surgical treatment or operation; 2nd, some cases refuse surgical interference; 3rd, many patients are so situated that they cannot obtain the services of a competent surgeon. The medical means at our command are well canvassed and electricity included in the study.

The most valuable chapters, to our mind, are those treating on diseases of the urinary organs; of the bladder and urethra; functional diseases of the bladder, caused by certain affections of the nervous system—a most excellent chapter; functional derangement of the bladder due to pelvic disease; organic disease of the bladder and cystitis. Part III, "The transition from middle life to old age" and the diseases of old age, is one of the gems of the book. Surgery cannot help us here, and the excellent advice of the author of this book will help us all.

LITERARY NOTES.

THE ALIENIST AND NEUROLOGIST for the April quarter has the usual good quality in its contributions. To any one who will study its pages this journal will give most excellent reading. Among the other interesting topics are Havelock Ellis on "Sexual Inversion in Women." Arther E. Mink writes on "Pupillary Diagnosis" and Dr. C. H. Hughes contributes a parody in psychiatry, "Paranoia of Cain." The selections, editorial and reviews are good.

A NEW MEDICAL JOURNAL. "*Medicine*" the new monthly journal of medicine and surgery comes as a successor, in a certain degree, of the *Lancet* which suspended publication this spring, and is under the editorial charge of Dr. Harold N. Moyer, of Chicago. The publisher is Geo. S. Davis, of Detroit, Michigan. There is no attempt at an "editorial" column, but the various specialities have each a department assigned them under the care of an editor of ability in that direction. The new journal bears the stamp of a purely scientific periodical of high class.

THE WELCOME extended in England to Volume II of the Funk & Wagnall's Standard Dictionary is something remarkable, especially so as England, being the

mother of the language, might be expected naturally to be somewhat sensitive at being asked to accept from America a dictionary claiming to be authoritative in the use of a language peculiarly her own.

The cordiality of the reception measures a notable change in sentiment since the historic comment of the "Edinburgh Review," made some decades ago, "Who reads an American book?"

THE MONTHLY ILLUSTRATOR, (published by Harry C. Jones, 92 and 94 Fifth Avenue, N. Y., single numbers thirty cents, per year \$3.00,) is a most welcome visitor this month. Thirty-three artists have been copied and nearly one hundred pictures, etchings, sketchings, paintings and photographs have been reproduced. The beautiful picture on page 260, "The Visit to the New-born," (Henry Mosler) will provoke a smile from any doctor. The hushed, awe-stricken manner of the three youngsters who are admitted for the first time to inspect the mysteries of the cradle, are familiar to us all. "Japanese game birds" show the quaintness of Japanese art, while Mary Earle's story "The Freedom of Père Mossy" leaves one doubting which to admire most, the fineness of the life pictures which the words portray or the aptness of the illustrations sketched by Clara S. Haggerty. "To the horizon—to the other silences—it will be long before we meet." Poor Père Mossy—and looking at pretty Miss Brownell dropped so hopelessly in her arm chair one feels like saying "Poor Miss Brownell." Ah well! How pictures—good pictures—do rest us and entertain us, and the *Illustrator* is full of good pictures.

LITTELL'S WEEKLY LIVING AGE.—While at this time other magazines are pressing their claims to the favor of the intelligent public, those of *Littell's Living Age* are not likely to be forgotten by those who know what its have been in the spread of the best periodical literature throughout this continent.

The price of the magazine, \$8.00 a year, is small in view of the vast quantity and high quality of its contents, a year's numbers forming four large octavo volumes of 824 pages each. As a special inducement, to any who desire to make a trial subscription, the twenty-six numbers, forming the first half of the year 1895 (January to June inclusive), will be sent for \$3.00. To any one remitting \$6.00 in payment for the nine months, April to December inclusive, the thirteen numbers forming the first quarterly volume of 1894, will be sent free.

Perhaps no better exhibit could be found of the progress and expansion of thought in the different fields of literature, politics and science during the last half century than a complete set of *Littell's Living Age* would present. Each volume is a mirror reflecting the living literature of the month it covers. Published by Littell & Co., Boston.

LIPPINCOTT'S is a favorite and becoming more so. The complete novel in the June issue is "The Battle of Salamanca," a stirring tale of the Napoleonic wars, from the Spanish of Benito Pérez Galdós, an author of high repute in his own country, but hitherto too little known in America. It is followed by a brief account of "Galdós and his Novels," by the translator, Rolla Ogden.

William Thomson a pioneer of the days when the California trail was new relates a wild Western adventure of long ago, "Beset in Aravaipa Canyon." The other stories of the number are, "As a Day in June," by Mary D. Hatch, and "Interwoven Strains," by J. Percival Pollard.

Under the title, "William Shakespeare: his Mark," William Cecil Elam shows how largely the speech of illiterate Virginians is that of the corresponding class in England near three centuries ago, as preserved by the great dramatist.

In "The Tyranny of the Pictorial," Sidney Fairfield exposes one of the most prominent fads of the day. He complains that pictures, especially of women, occupy too largely the place of reading matter; and all who are familiar with our illustrated papers and magazines—as who is not?—must admit that he hits the mark.

John Gilmer Speed writes with full knowledge on a topic of great practical importance, "Improving the Common Roads." W. D. McCrackan furnishes a sharp essay on "The Referendum and the Senate," and Dr. Charles C. Abbot an interesting study of Thoreau.

The poetry of the number is by Ella Gilbert Ives and Madison Cawein.

THE NORTH AMERICAN REVIEW FOR JUNE is at hand (*The North American Review* No. 3. E. 14th St., New York, single copies fifty cents, per annum \$5.00) and offers a table of contents extremely varied, timely and interesting. The opening pages are devoted to an important paper upon the "Power and Wealth of the United States," by Michael G. Mulhall, the noted foreign statistician, who forcibly maintains that the American people possess the greatest productive power in the world. Senator Henry Cabot Lodge, of Massachusetts, discusses "England, Venezuela, and the Monroe Doctrine" in an article of political interest, while J. Henniker Heaton, M. P., writes most entertainingly concerning "A Cable Post," and the possibilities of Atlantic submarine communication. General John Gibbon, U. S. A., asks "Can West Point be Made More Useful?" suggesting certain modifications in the rules at present governing that famous military academy, and in the second and concluding portion of "Glimpses of Charles Dickens," the last days of the great novelist are pathetically described by Charles Dickens, the younger. A valuable contribution on the "Military Lessons of the Chino-Japanese War," by Hon. Hilary A. Herbert, the Secretary of the Navy, will commend itself to every one interested in the recent warfare in the East. "The Silver Question" is treated this month by Count Von Mirbach, of the Prussian House of Lords and German Reichstag, who considers "Germany's Attitude as to a Bi Metallic Union," and by the Mexican Minister at Washington, who describes the effect of the "Silver Standard in Mexico." The former Governor-General of Canada, the Marquis of Lorne, furnishes "Some Thoughts on Canada," and the sixth installment of Albert D. Vandam's "Personal History of the Second Empire" is devoted to "The Renovation of Paris." "Nordau's Theory of Degeneration" is vigorously dealt with in a symposium which includes Kenyon Cox, the artist; Anton Seidl, the popular music director, and Mayo W. Hazeltine, the well-known literary critic of the *New York Sun*. Other topics considered are "The Modern Woman and Marriage," by Elizabeth Bisland, "Poor City Boys in the Country," by Alvan F. Sanborn; "Harnessing the Sun," by Prof. Peter T. Austen, and "The Silver Question in Ancient Times," by Plain-Speaker.

REPRINTS AND PAMPHLETS RECEIVED.

THE COMPLETE METHOD OF OPERATION IN CASES OF CANCER OF THE BREAST. By Dr. A. C. Bernays, St. Louis, Mo.

FIRST ANNUAL ANNOUNCEMENT OF THE BOARD OF HEALTH OF KANSAS CITY, MO. By Campbell Chapman, Clerk of the Board of Health.

INSANITY. By Orpheus Everetts, M. D., Supt. Cincinnati Sanitarium, Cincinnati, O.

TWENTY-FIRST ANNUAL REPORT OF THE SUPERINTENDENT OF THE CINCINNATI SANITARIUM, Cincinnati, O.

A PECULIAR CASE OF OESOPHAGEAL STRICTURE CAUSED BY A BENIGN TUMOR. Thos. Brooks, Dearborn, Mo.

PROSPECTUS OF BONNER SPRINGS LODGE, Bonner Springs, Kas.

MEDICO-LEGAL ASPECT OF PARANOIA—With Report of a Case. By John Punton, M. D., Kansas City, Mo.

THE EVOLUTION OF SCIENTIFIC NEUROLOGY AND ITS UTILITY IN MEDICAL PRACTICE. Same.

REVISED PRICE LIST OF COMPRESSED TABLETS. Parke, Davis & Co.

A NEW METHOD OF ANCHORING THE KIDNEY. By R. Harvey Reed, M. D., Columbus, Ohio.

- THE DIAGNOSIS AND TREATMENT OF FLOATING KIDNEY. Same.
- THE MANAGEMENT OF CARDIAC DROPSIES. By Joseph M. Patton, M. D., Chicago, Ill.
- PHARMACOLOGY OF KOLA. By Parke, Davis & Co.
- LAMINECTOMY FOR PARAPLEGIA FROM POTT'S DISEASE, ETC. Clinical Lecture by F. C. Shaefer, M. D., Chicago, Ill.
- A NEW WOOL-TEST FOR THE DETECTION OF COLOR-BLINDNESS. By William Thomson, M. D.
- THE PRACTICAL EXAMINATION OF RAILWAY EMPLOYEES, As to color-blindness, acuteness of vision and hearing. By William Thomson, M. D.
- HYGIENE OF THE ANUS AND CONTIGUOUS PARTS. By J. RAWSON PENNINGTON, M. D.
- THE ETIOLOGY, PATHOLOGY, AND TREATMENT OF INTESTINAL FISTULA AND ARTIFICIAL ANUS. By N. Senn, M. D., Ph. D., LL. D.
- THE SURGICAL TREATMENT OF SPINA BIFIDA. By Henry O. Marcy, M. D., of Boston, Mass.
- EARLY DIAGNOSIS OF CANCER OF THE UTERUS. By Edwin Ricketts, M. D., Cincinnati, Ohio.
- CHLOROFORM IN LABOR. By Edwin Ricketts, M. D., Cincinnati, O.
- REPORT OF A CASE OF PATHOLOGICAL SEPARATION OF THE LOWER EPIPHYSIS OF THE FEMUR. By A. H. Meisenbach, M. D., of St. Louis, Mo.
- BICYCLING FOR WOMEN FROM THE STANDPOINT OF THE GYNÆCOLOGIST. By Robert L. Dickinson, M. D.
- A CASE OF FRACTURE OF THE THYROID CARTILAGE, RECOVERY WITHOUT TRACHEOTOMY. By Thomas B. Eastman, A. B., M. D., of Indianapolis, Ind.
- CYLINDROMA ENDOTHELIOIDES OF THE DURA MATER CAUSING LOCALIZING SYMPTOMS AND EARLY MUSCULAR ATROPHY. By L. Bremner, M. D., and N. B. Carson, M. D., of St. Louis, Mo.
- THE PREVENTION AND TREATMENT OF OPHTHALMIA NEONATORUM. By Charles H. May, M. D., of New York.
- THE GRAPHIC STUDY OF ELECTRICAL CURRENTS IN RELATION TO THERAPEUTICS, With special reference to the sinusoidal current. By J. H. Kellogg, M. D.
- EIGHTH ANNUAL REPORT ST. MARGARET'S HOSPITAL, Kansas City, Kas. 1895.
- THE PRE-TUBERCULAR AND PRE-BACILLARY STAGES OF CONSUMPTION. By Charles Manley, A. M., M. D.
- NERVOUS DISEASES IN EARLY SYPHILIS. By G. Frank Lydston, M. D.
- A FEW REMARKS ON THE EARLY HISTORY OF RECTAL DISEASES, and Railroadings as an Etiological Factor in Rectal Diseases. By S. G. Gant, M. D., Kansas City, Mo.
- THE SURGICAL TREATMENT OF INGUINAL HERNIA. By Henry O. Marcy, A. M., M. D., LL. D., of Boston, U. S. A.

LITTLE ITEMS.

Dr. Frank Smiley is in New York taking a post-graduate course.

Dr. Beasley & Son, of Linden, Kansas, have located in Kansas City, Mo.

Ammonia is the best application for bites and stings of insects. Next in value comes common soda.

If you wish to know, the trephine was first used in this country by a Boston doctor, John Clarke, M. D.

Dr. Geo. Kresgar, of Lee's Summit, Mo., has been on the sick list for some time, with gall stone colic.

The University Medical College is building an addition to its lecture room to give added room for its work.

Dr. N. A. Tisson, Kansas City Medical College, class of '95, has located at 1209 Indiana Avenue, Kansas City, Mo.

Dr. Prettyman, of Melvern, Kansas, spent several days in the city recently in attendance upon his sister, Mrs. Hardin, who has been quite ill.

Dr. A. Scott, until recently district physician of Kansas City, has departed for the sunny lands of Kansas to resume his practice of medicine there.

The Kansas City Medical College has completed the plans for its new building, which is to be at 7th and Washington streets. We expect a full description and cuts for the July INDEX.

The *Journal of Inebriety* says, "All inebriates suffer from poisoning, auto-intoxication, starvation and exhaustion. A large proportion of inebriates have mal-formed nerve centers."

Dr. Emory Lanphear, of St. Louis, has given us an excellent series of lectures upon "Intracranial Surgery," in recent numbers of the *Journal of the American Medical Association*.

Dr. H. D. Palmer, one of the oldest practitioners in this section of the country, was a recent and pleasant caller at the INDEX office. The doctor was an attendant upon the District Medical Society.

We are in receipt of a report of the clinic of Dr. George W. Davis, Professor of genito-urinary diseases in the University Medical College. The doctor reports one of the largest clinics of this character in America.

Kansas City, Kansas has a tax of \$20.00 per annum on doctors as a license to practice. The doctors have combined to fight it, and we hope they will succeed. The principle is a narrow and unjust one.

Dr. Grant Bey, we learn from the *Egyptian Gazette* of May 18th, has gone to San Stefano Hotel for a few week's change of air, which has been considered necessary after his recent illness. His wife and daughter accompany him.

Of the class of '95, Kansas City Medical College, whose location we have learned we note: Dr. G. N. Towers, at Mount Zion, Mo.; Dr. M. A. Buler, and Dr. S. C. Clark, at Ozawkie, Kansas; Dr. B. F. Bowline, Zebra, Mo.

Dr. Howard Hill, a "prize winner" of the class of '95, Kansas City Medical College, has located at Leavenworth, Kansas. His address is 409 North 3rd Street. He is engaged as Medical examiner for an insurance company and is doing well.

Dr. C. Lester Hall was elected by acclamation President of the Missouri State Medical Association for the coming year. The INDEX has before stated that Dr. Hall had more personal friends than any one doctor in Missouri, and this confirms the statement.

Dr. J. P. Bryson, of St. Louis, Mo., reports a case in the *New York Medical Journal* of castration for enlarged prostate (White's operation) done under cocaine and thinks he has recorded the first case of the kind. A description of the operation is given in detail.

The best remedy for excessive sweating, when in the judgement of the physician it should be stopped is belladonna, given in doses of one to ten drops of the tincture, according to age and increased or repeated if needed. Children take larger doses in proportion than of other drugs.

Dr. Lesser says, "I am frequently called to cases of supposed appendicitis which are really nothing more than instances of acute entero-colitis. Many acute diseases will cause tenderness in the vicinity of the appendix; I have seen this in la grippe. My experience has been that the opium treatment has usually proved harmful.

In the June number of the *North American Review* the Hon. Hilary A. Herbert, the Secretary of the Navy, who has been a close observer of the recent warfare between China and Japan, contributes an interesting article on the "Military Lessons of the Sino-Japanese War," and incidentally outlines the policy to be exercised by the United States toward the two eastern nations.

Dr. Carroll Chapman, of Louisville, Ky., a prominent young physician and editor of the *Medical Progress* died of cerebro-spinal meningitis on May 28th. Deceased was a member of the faculty of the Kentucky School of Medicine and a man of unlimited ability as a practitioner and writer.

Among the short articles published in the *North American Review* for June are "The Modern Woman and Marriage," by Elizabeth Bisland; "Poor City Boys in the Country," by Alvan F. Sanborn; "Harnessing the Sun," by Prof. P. T. Austen, and "The Silver Question in Ancient Times," by Plain-Speaker.

Dr. Augustus C. Bernays, of St. Louis, gave a number of clinics to physicians who were in St. Louis on their way to attend the meeting of the Mississippi Valley Medical Association. The report has been published in neat pamphlet form and reaches us this month. It is a graceful compliment to the gentlemen attending.

The Mitchell District Medical Society, meeting at West Baden, Indiana, July 5th and 6th will have on its program some eminent names. Dr. Joseph Eastman, of Indianapolis, is president and gives the address, Bernays and Loeb of St. Louis, Lydston, Etheridge and Henrotin of Chicago, and others will contribute.

The officers of the National Association of Military Surgeons for the ensuing year are: Lewis W. Read, of Pennsylvania, President; Albert Gihon, U. S. N., First Vice-President; C. H. Alden, Assistant Surgeon-General U. S. A., Second Vice-President; E. Chancellor, of St. Louis, Secretary; Lawrence C. Carr, Cincinnati, Treasurer.

The University of Missouri at Columbia, Mo., will hold a summer school of Science in which laboratory courses of six weeks each will be given in Biology, Physics, and Chemistry. These are for high school teachers of the state. Our Dr. N. A. Harvey, of Kansas City High School, is one of the teachers of Biology. There are no fees for tuition or supplies.

The men of Massachusetts, headed by Albert A. Pope, have taken up the fight for good roads and have spent many thousands of dollars in investigating road building. Let us help on the good work. As physicians we are all interested in good roads. Write to Mr. Pope if interested in what he has done in road building. We are sorry we have not space for his entire article in the INDEX.

Dr. Allen T. Sloan reports through the *Edinburgh Medical Journal* a case of aspiration of the heart. The trocar was plunged through the chest wall to draw off the fluid in a case of pericarditis with effusion, as the patient was dying of heart failure. By mistake the right ventricle of the heart was opened and eight or ten ounces of blood withdrawn. The patient's pulse was imperceptible at the time. The canula was withdrawn a little, the fluid drawn off and the patient, to the physicians surprise, recovered consciousness, improved, and ultimately recovered entirely.

Mr. H. D. Barto, who has been identified with the drug trade of this city, has located near Independence, Mo., about thirty minutes ride from Kansas City, a "baby dairy." A herd of Jersey cows have been quartered in a blue grass pasture, the milking sheds and milk rooms kept scrupulously clean, and the milk at once cooled and sterilized, or Pasturized, and sealed in bottles for feeding. The milk will be delivered in Kansas City or sent by express where needed. "Modified Milk," altered in respect to fat, caseine, or water, will be furnished according to the wishes of the attending doctor.

The coming fad among medical men of high attainments and large practices is the employment of a business manager. The doctor does not see his patients until they have consulted the business manager, who fixes prices, attends to collections, arranges hours and dates and eliminates all financial and business features from the coming consultation. The doctor attends only to his professional duties and any charity patient admitted by his manager holds the same place in his attention as a millionaire. The deadbeat is debarred, the man who claims great attention and then annoys and worries the doctor by haggling about the fee is tenderly cared for; the crank who threatens damage suit to avoid payment is heard only in the business office; the wealthy and those able and willing to pay, can secure the doctor's time unmarred by business cares, and the physician makes more money out of the arrangement as a result. There is much to commend the movement.

"ROBINSON'S LIME JUICE AND PEPSIN" is an excellent remedy in the gastric derangements particularly prevalent at this season. It is superior as a digestive agent to many other similar goods. (See page 10, this issue.) See remarks on their Arom. Fluid Pepsin also.

READING NOTICES.

J. W. Snowden, M. D., A. E. San Jose, California, on April 12th, 1895, writes: Your Bromides acts like a charm. I believe it a safe, effectual and reliable hypnotic.

Report from Thos. S. White, M. D., Kansas City, Mo.: "I have tried Stearns' Wine of Cod Liver Oil, am highly pleased with the effects, and shall continue to use it in my practice."

One of the most attractive articles among the many new goods offered by the Physicians Supply Co., Kansas City. Mo., is their new Buggy Case. It is the leader of leaders. Write for prices.

TORPID STOMACH.—If the stomach of your patient is torpid and will not secrete enough gastric juice to digest his food then give him two or more fluid drachms of Seng before each meal. Seng is the only remedy that will normally increase the flow of the digestive fluids.

A few months ago I was suffering from hepatic torpor and I am happy to say that after taking two bottles of Peacock's Chionia I feel greatly relieved, and that Chionia has done me more good than any other preparation I have ever used. In hepatic disorders I shall always give it preference to other remedies, knowing its therapeutic value.

Chicago, Ill.

T. ED. DEPONDROM, M. D.

ELLENVILLE, N. Y.

Wheeler Chemical Works:

GENTLEMEN:—I have cured every case of Eczema in which I have used your Noitol and look for results as much as when I prescribe Quinine in "chills and fever." Noitol is a grand, good thing.

Yours truly,

STANLEY M. WARD, M. D.

"AMONG THE OZARKS," THE LAND OF BIG RED APPLES, is an attractive and interesting book, handsomely illustrated with views of South Missouri scenery, including the famous Olden fruit farm of 3,000 acres in Howell county. It pertains to fruit raising in that great belt of America, the southern slope of the Ozarks, and will prove of great value, not only to fruit growers, but to every farmer and homeseeker looking for a home.

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Address,

J. E. LOCKWOOD, Kansas City, Mo.

A REMARKABLE CASE OF INCONTINENCE OF URINE IN A CHILD.—Four months ago I treated a remarkable case of incontinence of urine in a child. It was seven months old, and had urinated from fifteen to twenty times every night since it was born, requiring its wrappers to be changed that often. I gave it one-third of a teaspoonful of Sanmetto four times a day, and before one bottle was used the babe was well, and it still remains so. In the last two years I have used several bottles of Sanmetto in the treatment of various affections of the genito-urinary organs, and with the most gratifying results in every case.

E. S. ATHEARN, M. D.

North Englian. Iowa.

DISTURBANCES OF INNERVATION.—Robert B. McCall, M. D., *Medical College of Ohio*, Cincinnati, now residing at Hamersville, Ohio, writes: "My confidence in antikamnia is so well established that I have only words of praise. Independently of other observers I have proved to my satisfaction its certain value as a promoter of parturition, whether typical, delayed or complicated, and its effectiveness in controlling the vomiting of pregnancy. In cases marked by unusual suffering in second stage, pains of nagging sort, frequent or separated by prolonged intervals accompanied by nervous rigors and mental forebodings, one or two doses, three to five grains each of antikamnia promptly changes all this.

"If there is a 'sleepy uterus' antikamnia and quinine awake every energy, muscular and nervous, and push labor to an early safe conclusion. Indeed, in any case of labor small doses are helpful, confirming efforts of nature and shortening duration of process.

"I have just finished treatment of an obstinate case of vomiting in pregnancy. A week ago the first dose of antikamnia was given, nervous excitement, mental worry and gastric intolerance rapidly yielded. This case was a typical one and the result is clearly attributable to the masterly influence of your preparation.

"If there is any one drug or preparation that can be made to answer every need of the physician, for the correction of the multitudinous disturbances of innervation that occur in the various diseases he is called upon to treat that one is antikamnia."

KANSAS CITY MEDICAL INDEX,

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ORIGINAL ARTICLES.

BRAIN RESISTANCE TO UREMIC POISON.*

BY DR. BRUMMELL JONES, KANSAS CITY, MO.

Professor of Diseases of the Brain and Nervous System in the College of Physicians and Surgeons :
[Medical Department of Kansas City University] ; Chairman of Committee on Practice
of Medicine Missouri State Medical Association ; Chairman of Committee on
Education of Feeble-Minded Children, Missouri State Teacher's
Association ; Former Professor of Physical Diagnosis
and Clinical Medicine, University
Medical College, etc.

"To control a subject, to be its master, to concentrate upon it all that is absolutely necessary, demands in truth, the powers of a giant, and is more difficult than one would think."—*Schiller*.

"In acute congestion of the kidneys, epileptiform seizures, and other symptoms of so-called uremia, are not infrequent; and the same holds good respecting chronic Bright's disease. In such cases the amount of urea is far below the normal standard, but nevertheless it is considerable at times. If the non-excretion of urea is the true and only cause of so-called uremic symptoms, how is it that coma and convulsions are not present in numberless cases of dwindled granular kidneys, in which the specific gravity of the urine ranges for years together between 1001 and 1003, and in which, therefore, the amount of urea excreted by the kidneys is reduced to a minimum? Again, how is it that patients in whom a total suppression of urine occurs, and in whom, therefore, the excretion of urea through its natural channel is absolutely arrested, not infrequently go for a week or ten days without the slightest cerebral disturbance? Such instances are not explained by the draining off of urea by the bowels, for ordinarily the secretion from the bowels is not excessive, or in any respect abnormal; neither is it to be explained by the vicarious action of the skin, for very often the skin is dry and inactive.

Again, if so-called uremic symptoms were due solely to the presence of urea in the blood, how does it happen that a patient ever recovers who has ever manifested symptoms of uremic poisoning, including convulsions and coma? During the fit and subsequent insensibility, the secretions, if not extremely scanty, are certainly not more profuse than before the attack; and presumably the amount of urea in the blood must be as large at the termination of the seizure as it was before the fit commenced. Nevertheless patients emerge from these seizures and remain well for months and years without any farther attack, although the secretions from the kidneys, the skin and the bowels remain exactly as before the seizure. Of course these attacks never occur except when the secreting powers of the kidneys are interfered with;

*Read before the Missouri State Medical Association.

but it is equally obvious that some other factor is necessary."—*St. George's Hospital Report.*

Now I propose to attempt an answer to a part of this general question from the standpoint of immunity gained by gradual infection, or by inheritance, and to show that the balance of resistance wavers on account of intercurrent diseases or conditions.

The group of symptoms called uremia consists of cerebral disturbances, headache, restlessness, sleeplessness, delirium, stupor, convulsions, and coma, —repeated and uncontrollable vomiting and dyspnea.

A gentleman who for years had been detecting albumin in his urine, was somewhat abashed when I informed him one day that the proposition, made to him by numerous medical advisers, that his albuminuria was physiological, was incorrect. At this time he was only discharging about two hundred and twenty-five grains of urea within twenty-four hours, and the urinary water amounted to about sixty ounces. His weight was about one hundred and sixty pounds. I expected that this man would go off his feet, any day, in a convulsion. Strange to relate, he went on at this pace of urea for some weeks, and it was not until after an exposure to severe wintry weather and the contraction of a severe cold, that the convulsion came on.

A gentleman sixty-five years of age was troubled with insomnia and a marked mental aberration. He told his medical attendant, and it was a fact, that he was discharging a large amount of urinary water; but an analysis of the urine gave only one hundred and eighty grains of urea in the twenty-four hours. The urine in this case amounted to sixty or seventy ounces. This man weighed about one hundred and eighty pounds.

The history of the first case was this: A personal friend of the patient detected albumin in the urine twelve years before my diagnosis was given. Unfortunately the man's medical advisers had been his personal friends, and they insisted that the albumin meant nothing. In the second case, it is beyond question that this abnormally low quantity had been existing for a number of years.

Some time ago a gentleman came into my office and said: "Dr. Jones. I am drunk." Now that was not a statement that should carry any surprise, because I had seen him in a condition of moderate intoxication several times. "But," he said, "I have not taken a drop of alcoholic stimulant for nearly three days, and yet I feel the same peculiar condition about my head and feet that I sometimes feel when I have taken too much wine or whiskey." I was rather glad to hear him make this statement, because I myself had more than once, without apparent cause, experienced a sensation somewhat akin to his. I had often been on the point of putting the proposition to some physician whether or not a man could have all the conditions of a moderate alcoholic intoxication, without having taken alcohol or its congeners. The condition that the gentleman was in, I suppose, was possibly due to a fermentive process that had gone on in the intestinal tract, and some ethereal or alcoholic quality had been taken up by the blood and carried to the brain.

We are well aware that the neophyte of the barroom, if he commence

bravely at his drinking, is going to be knocked off his feet with a very moderate amount of stimulant; but, if he be moderate in his beginnings, he will get to a point of imbibing large quantities of liquor without producing any marked intoxication. If the opium habitue had begun his dosage in quantities of half a grain of morphia, he probably would not have lived to become a habitue; but the fact is, he has begun with what we might call infinitesimal quantities, and has gone on and on until he takes from ten to twenty grains a day, and seemingly keeps in fair health.

To my thinking, there is an analogy between the moderate drinker, the moderate user of opium and the urea habitue. We will say for instance that the first man, to whom I have called attention as weighing one hundred and sixty pounds, should have discharged about five hundred grains of urea, and possibly fifteen years before he died he did discharge that much. We can realize, in the slow process of the growth of an interstitial nephritis, or the gradual metamorphoses in an amyloid kidney, that during the first two years after the disease began the reduction was only twenty grains, and possibly in the next year the reduction may have come down thirty grains more. Now, either of the two cases cited became as much accustomed to the absorption of the constituents that go to make up urea as a subject becomes accustomed to the impress of morphine or alcohol. If the one had not unfortunately contracted a severe cold, from exposure to raw weather, the possibility is that he might have gone a year longer before going into convulsions. It goes without saying that when the amount of his urinary water was increased to eighty or one hundred ounces, or its specific gravity was raised, or a compensating catharsis had been established, or the system was relieved by diaphoresis, the convulsion subsided.

In the second case reported, the chances are that the disease had been of much longer probation and the subject was much more of a habitue than the former. In this case, the man weighing one hundred and eighty pounds, giving only a grain to the pound weight, there were no convulsions, no choreaic movement, nothing in the form of epilepsy, barely a headache,—but there was the *insomniæ*, the *mental aberration* and *nausea*.

A number of cases with their histories could be cited to establish this fact of what might be called brain immunity from the poison of urea, or brain resistance to uremic poison, but which is really only the tolerance of a brain that through long years has become accustomed by moderate dosage.

Before going into the conditions that produce this decrease in the quantity of urea formed, it is well enough to make some remark upon the tolerance of stimulants and narcotics in the same system at different times. For instance, a man who is accustomed to drinking strong coffee for breakfast may on one morning be perfectly satisfied, or reach the necessary point of stimulation by a single cup, and at other times three barely producing the same effect. A man not an habitue, may occasionally take a given amount of opium or cannabis indica with impunity, while at another time the same quantity will produce discomfort, and at another time it may fail to make any impression. Take a man who is accustomed to drinking a certain amount of wine or

whiskey from day to day; on most days the modicum will be sufficient for his needs, but on some days it will be insufficient, while on others it is more than enough. Following this thought, I can appreciate that the patient, who went into a convulsion after the weather exposure might then have been discharging *three hundred and thirty* instead of *two hundred and thirty* grains of urea. It seems to me that the thing that holds good in regard to stimulants, narcotics that we administer, will hold equally good with those stimulants, narcotics and nerve disturbers that are found in our own organization.

To make clearer and more evident my proposition of immunity by "gradual process" it will be necessary to consider in detail the pathological conditions that produce this progressive diminution of urea. In the first years of my practice a case was brought to me that more than any other has influenced my investigation of disease. The patient, a farmer, was a powerfully built man, forty years of age, and had descended from a hardy German ancestry. His first complaining dated from the loss of his house by fire a few months before, at which time he became overheated. He was unable to detail his sensations, but said that he felt badly and was not able to go about his work with any spirit. Six months after the occurrence of the fire, while sitting at his table one evening, a sensation of numbness gradually settled in his left leg and arm, and when he attempted to rise he was unable to do so. This was four months before I saw him. He had severe persistent pain in his head; the action of the heart was *very* strong, and there was dimness of vision in the left eye. There was loss of memory and very little power in either the arm or foot. Feet and legs slightly cedematous; had light chills every day or two; was very nervous and did not sleep well. Two months after the patient came under my observation, I notice in my case book, the entry,—*"Patient has Bright's disease."* Six months after he came to me he died. The power had been restored to the hand and foot for some time; he had become very much emaciated; had convulsions, and died directly from pulmonary cedema.

Now the puzzling part of this case to me was,—while he had albumin in his urine and had some evidence of dropsy,—the two conditions that Bright at first required for his disease, yet he had large discharges of urinary water, and that of low specific gravity.

While one *may have* atheromatous arteries without having a fibroid kidney, we cannot have a fibroid kidney without the atheromatous artery. In every case of interstitial nephritis we have atheroma of the arteries; and this atheroma, in all probability, long precedes the involvement of the kidney. This atheroma, or fatty degeneration of the walls of the arteries, is a consequence of chronic arteritis.

In the case that I have just related, my patient had one of two immediate troubles when numbness came in the left arm and leg. There was either a cerebral apoplexy or thrombus, and there are cases where the physician cannot differentiate; but, whichever it was, an atheromatous artery was responsible for it.

Ralfe describes interstitial nephritis as,—*"Essentially a chronic form.*

commencing with changes in the glomeruli and vessels—atrophy subsequently taking place in the parts supplied by these vessels, together with vessels, together with some degree of interstitial growth, and which is represented typically by the small red granular kidney." It is, I believe, now conceded that we have two forms of diffuse nephritis, or Bright's diseases. 1. The parenchymatous (acute or chronic). 2. The interstitial or chirotic form. The amyloid, or waxy kidney, is not now regarded as being in that class; nor is the cyanotic necessarily the result of a defective heart valve. Rosenthal has gone to the extent of declaring for one form. He says, "Diffused inflammation is the basis of the morbus Brightii, an inflammation, which like other organs, begins with changes in the circulation. It is characterized by the exudation of the lymph corpuscles, whilst at the same time the epithelial elements of the glomeruli and urinary tubules are effected by the inflammatory irritation. The kidneys, therefore, that come under observation in Bright's disease, always show changes of all the tissue elements, and though one element may be more prominent in its alteration than another, we are not, therefore, to speak of a parenchymatous or interstitial nephritis, but only a diffused inflammation. Only, more or less, the preponderance of one or more tissue element determines the outwardly different forms of the red swollen, large white, the pale granular or mottled, the white shrunken, and the red granular kidney."

Dr. Saundby heartily endorses this view. He considers that the small red and large white kidney, with all the intermediate varieties, to be the result of an inflammation, which affects all the tissues but varies in intensity. "The parenchyma of the kidney, being the most highly organized, necessarily suffers most in proportion to the intensity of the inflammation. The large white kidney is, therefore, the result of *repeated severe inflammation*, whilst the small red kidney indicates an inflammatory process of *prolonged duration but of a minimum intensity*, and the intermediate varieties correspond to all the different degrees of intensity possible between these extremes." Saundby had some rather novel ideas as to classification in these troubles, but they are based on the facts of clinical observation and pathology. 1. Febrile nephritis,—including all those cases of acute or chronic febrile disease. This nephritis is directly dependent upon the fever process—hence its name. 2. Toxemic or lithemic nephritis, including the great group of chronic Bright's disease due to lithemia, and is especially associated with the small red granular kidney. It probably depends on irritation of the kidney by the excessive elimination of poisons of which uric acid is a type. 3. Obstructive nephritis, including all cases dependent on obstruction of the outflow of urine. His second class of lithemic nephritis covers our interstitial, and is a somewhat better name because it carries with the name the etiology of the disease. While cold and wet are the great factors in the production of the febrile or parenchymatous form, we have other factors in this interstitial or lithemic type.

Before proceeding to the causes I wish to state, and I think it will be significant in the theory which I embrace, that women are less often affected

with interstitial nephritis than men. Dr. George Johnson says: "Renal degeneration is a consequence of long continued eliminaton of products of faulty digestion through the kidneys. As albuminoid matters as proteoids cannot enter the blood, this faulty digestion does not lie in the alimentary canal. Soluble peptones alone enter the portal vein, and the faulty digestion we now know, lies with the liver. The starting point of Bright's disease, then may be said to be liver incapacity."

Most people, and especially our farming population, eat too much meat. Fothergill says that the average Englishman has at forty-five years a kidney complication. "So long as the liver possesses the power of converting this over consumption into soluble urea, all is well. Soluble urea passes out of the liquor sanguinis in the renal secretion without difficulty; but not so uric acid." Urea belongs to the warm blooded mammalia with fluid urine, while uric acid is the form of excrementitious nitrogenized matter in the warm blooded bird and the cold blooded reptile. In other words, urea belongs to the animal with four chambers to the heart, while the tri-chambered heart is found with the uric acid. Now, so long as the liver can convert the over consumption into urea, so long can man eat albuminoids in excess of his body wants; but when this power wanes, and products belonging to a lower stratum of creatures are formed,—then it is a different state of affairs.

Gout in some of its protean forms is likely to show itself. Uric acid is the poison of gout, and when it is formed in any quantity in the body, then a condition of lithiasis or lithemia is supervened. I am inclined to think that the influence of strong alcoholic drinks, which have a decided influenc in producing Bright's disease, is indirect, attacking the liver directly rather than the kidney."

The reference to the fathers eating sour grapes may not refer entirely to those who lingered late in the vineyards of Bacchus or dallied too long in the tents of Venus. Many a sober-sided man has over stayed at his virtuous table, and handed down to his son an impaired liver and an athermatous artery. When lithiates abound in the blood, one of two things happens; either some remain in the body as gout, or the kidneys become inured by their output of lithiates, or maybe more or less of both are found. Many persons pass turbid urine laden with lithiates for years, apparently none the worse; but all the same, their doom is ahead of them.

During a final talk with a man sixty years of age, in regard to his condition, he remonstrated because the medical profession could not reach his case. "But the time has been when it could," I replied. "When?" he asked. "Say, twenty years ago, when you first located on this farm and began to drink water from that limestone well in the yard, and began to have breakfast three times a day (hot biscuits, fried pork and hot coffee,) and braced yourself with McBreyer; when you utilized your milk for butter making and sold your vegetables; when you did a thousand other foolish things that brought about serious changes in the blood, which brought about changes in the coates of the arteries, which resulted in the occlusion of many of the minor ones; which brought about changes in the interstitial tissue of the kidneys, which in turn

brought about hypertrophy of the left heart, and on and on." "But, Doctor, I was not sick then." "When a man is well is the time that he needs a physician.

The gist of this conversation lies deep. A man cannot be a therapist unless he be a pathologist, and your true pathologist is not an optimist in the realm of therap. In sanitary science he would not be so pessimistic. I do not think that I belong to what is known as the humoralist school, but believe that many of our chronic troubles commence years and years before we are aware of their presence. Most of them are the result of the vices of living (I use "vices" in its broadest sense), and not the least of these vices is the unsuitable material which we use for blood making and blood recuperation. To get to the case in point, I do not believe that a man, unless he inherited a tendency to interstitial nephritis, or had had a specific trouble, could have it, if he lived on bread and milk, potatoes and vegetables and drank distilled water. In other words I believe that interstitial nephritis depends to a very large extent on bad feeding and drinking.

In a paper on the significance of headache, read before the State Medical Association at Pertle Springs, I called attention to interstitial nephritis as one of the causes of headache. I also stated that this trouble was more common among us than some of us thought. It is as insidious, and it is as far reaching as the female octopus; and I will add, almost as deadly.

Chronic parenchymatous nephritis may have an acute stage; it is marked by no increase in the amount of urinary water,—generally a diminution; has very appreciable amounts of albumen and has granular tube casts. Edema and general dropsy are likely to come on early, and there are no cardiac changes. The interstitial variety has no *acute* stage; is attended with marked increase of urinary water, amounting at times to as much as a gallon in the twenty-four hours, and even more of low specific gravity, ranging from 1002 to 1010, may or may not contain albumin,—(frequently *does not* in the earlier stages), containing an occasional hyaline cast. Ultimately there is high arterial tension and atheroma of the arteries. I do not remember to have seen a case in which I did not find the whip cord feel at the radial pulse, and there is hypertrophy of the left heart. This high arterial tension is one of the most troublesome of the accompaniments to overcome.

There are three diseases which might be mistaken for interstitial nephritis,—diabetes mellitus, diabetes insipidus, and amyloid infiltration of the kidney. In each of these three there is a decided increase in the amount of urinary water, and in advanced diabetes mellitus there is likely to be albumin, but the presence of the sugar would be a decided diagnostic point. In interstitial nephritis there is a decided decrease in the amount of phosphoric acid eliminated. This is also a fact in the amyloid kidney; but in diabetes insipidus, the phosphoric acid is not only not decreased but is rather increased. In the waxy or lardaceous kidney there is involvement of the liver and spleen as well as the kidney, but there is no cardiac hypertrophy, no atheroma of the artery, no high arterial tension, and there is considerable more albumin than is found in interstitial nephritis. In diabetes insipidus the same points as to arterial

and cardiac changes will hold. I want to say this, that when a case of diabetes insipidus comes to me, I am particular to satisfy myself that it is not an incipient nephritis, and do not let go because there is no albumin.

I want to make a statement here that is just a bit humiliating. Some years ago I took up the cudgels in favor of physiological albuminuria. I do not believe that it ever had the indorsement of my head, only of my heart. A man who pretends to be a scientific man should look out for the equation of sentiment, for if he does not it will trick him when he least expects it. The safe machinist is not a man of sentiment, at least not while at work.

Besides a decided increase in the amount of urinary water being significant of the existence of interstitial inflammation in the kidney, a great deal of this water is passed at night. It is not a natural state of affairs for a patient to habitually have to get up at night to empty his bladder, and if he has to do this two or more times it is suspicious. Many of the subjects of this disease pass more urine at night than they do in the day time. Such patients drink a great deal of water, not in large draughts but in sips.

The presence of the parenchymatous forms of nephritis is generally well marked, but the interstitial variety is more difficult. The term Bright's disease is confusing, from the fact that it has been applied to every form of kidney trouble, but there are only three conditions which properly come under the head of Bright's disease,—the inflammation of the parenchyma, or tube; the inflammation of the glomerule, and the inflammation of the stroma or interstitial tissue. The inflammation of the glomerule (Milliard) may exist without either the tubules or stroma being inflamed, but neither the tubule nor stroma could be long affected without the glomerule being involved. While the amyloid kidney does not come under the class *morbus Brightii* it may be attacked by interstitial inflammation. The terms large white kidney, mottled kidney and large yellow kidney, do not express different forms of disease but rather gradations of the same disease,—tubular nephritis.

Chronic tubal nephritis may begin as a chronic affection or sub-acute. It, like the interstitial form, results in a contracted kidney, if the patient live long enough,—the pale shrunken kidney. In the progress of inflammation in the chronic tubular nephritis, there is the stage of enlargement by epithelial proliferation and intertubular growth,—commonly known as white kidney (large); a stage of regression ensues, caused by atrophic and fatty degeneration changes taking place in the large white kidney, which changes ultimately produce what is known as pale granular kidney. When the contraction caused by these atrophic changes is carried to its fullest extent and the fatty degeneration of the renal tissue is complete, then we have what is known as the small fatty granular kidney. In typical cases, chronic interstitial nephritis leads to the small *red* granular kidney. Of course we do not always have typical cases, and *fatty* degeneration may exist with the interstitial form.

The progress of interstitial nephritis is slow and extends over a number of years, and it is more difficult to note the progressive changes that take place than in the tubular form. There is a marked difference in the clinical

history of the two varieties. In the chronic tubular variety in the early stage, we have diminished secretion of urine with high specific gravity, abundance of albumin, and a special tendency of dropsy, while uremic symptoms, cardio-vascular changes and arterial degeneration are not observed until till the disease has reached its height and the contraction of the secondary atrophy considerably advanced. On the other hand, in the interstitial variety, the earliest symptoms noted are the increased excretion of urinary water of low specific gravity, cardio-vascular changes, characterized by hypertrophy of the left ventricle, pulse of high tension and uremic symptoms more or less pronounced, while the amount of albumin in the urine is never great, and in the earlier stages may be entirely absent; and dropsy, which is so marked in the tubal form, is never observed until the close, when the aortic system begins to fail, owing to the degenerative changes occurring in the hypertrophied left ventricle, and even then it is hardly excessive; possibly confined to slight oedema along the course of the tibia, and in the lower eyelids.

The bother in differentiating the interstitial nephritis from the tubal is not nearly so serious as in discriminating between it and the amyloid kidney, and between it and the two forms of diabetes,—insipidus and mellitus. Prior to amyloid infiltration will be a history of an exhausting disease, a syphilitic or other cachexia, a prolonged suppuration, etc., etc. An illustrative case is that of a colored patient, Albert Brooks, who was at the city hospital some years ago, and who suffered for years from an ischio-rectal abscess upon which a waxy infiltration of the kidney took place. I mention this case in particular, because it is familiar to every clinician in Kansas City.

Dr. Bright taught that "when albumen is found in the urine with dropsy, disease of the kidney is present." That was afterwards modified to finding albumin. Now, the existence of both conditions do not signify disease of the kidney *per se*. If a formula is to be used, I would suggest Ringer's as being the most accurate,—“high arterial tension and hypertrophy of the left heart, associated with an increased amount of urinary water containing albumin (a small quantity), enable us to diagnose the contracted form of Bright's disease. And, yet, the absence of albumin may not nullify the formula.”

If a person comes to me complaining of a persistent headache with nausea more or less continuous, if he is also discharging large quantities of water, having to empty his bladder two or three times at night, and added to this I find hypertrophy of the left ventricle and an artery at the wrist that rolls up under my finger like a whip cord, even if I found no albumin, I would be disposed to think that I had an inflammation of the stroma of the kidney to deal with. I say nothing of the ocular evidences, because when they are established our diagnosis would be of no avail to the patient.

RECAPITULATION.

Interstitial nephritis is always sub-acute; there is a large quantity of urinary water of low specific gravity, ranging from 1001 to 1010. There is atheroma of the arteries, or there is at least an arterio-sclerosis, which possibly begins as an endarteritis. There is hypertrophy of the left ventricle, and there may or may not be a slight show of albumin. There are cerebral troubles;

in fact, headache is an early symptom, and there are disorders of the digestive apparatus. If œdema is present it is confined, in the early stages at least, to the feet and ankles, and is very slight. There is sometimes slight puffiness about the lower eye-lids. As much or more, urine is discharged during the night time as in the day. The quantity will range all the way from fifty to one hundred and fifty ounces. If an estimate of the urea is attempted with the urinometer, the albumin, if present, should first be removed by infiltration. I have seen patients going about their work who were eliminating through their kidneys less than two hundred grains of urea, and I have had patients in bed who were eliminating more. There is a marked disappearance of the chlorides, they at times disappearing altogether. There is a decrease also in the amount of phosphoric acid. The arterial tension is high until the close. Convulsions and mental aberrations are apt to occur at any time, and are often the first indication to the patient of his trouble. Nausea is a frequent symptom. Visual disturbances are present often before changes can be noticed by the ophthalmoscope. A few casts will be found. They are hyaline, narrow and dotted with oil globules. Epithelium (renal) will be found. If granular casts are found it is an indication that the nephritis has taken on an acute form. Waxy casts are not so often found as they are in tubal nephritis. Crystals of oxalate of calcium are found intermingled with crystals of uric acid.

DIABETES INSIPIDUS.

In this trouble there is also an excessive flow of urine of a low specific gravity, but there is no cardio-vascular change, no albumin, which there may be in interstitial nephritis, and the phosphoric acid which is so markedly decreased, is in diabetes insipidus not only not decreased but may actually be increased.

WAXY OR LARDACEOUS KIDNEY.

In this affection we also have a profuse flow of urine of low specific gravity. The amount of urine discharged probably never reaches the large quantity that it does in contracted kidney, and Bartels says that the specific gravity never goes below 1006. The urea is not so much reduced as in contracted kidney, and I believe that albumin is also present. Interstitial nephritis may and I think is likely to be engrafted upon it. The microscope will show, as in the contracted kidney, epithelial cells and hyaline casts, but there are no cardio-vascular changes, and uremic convulsions are rare. A patient suffering from these troubles becomes rapidly pale and is easily fatigued. In these cases the spleen and liver are involved.

Lancereaux (Sajou's annual) has made a statement that will probably have in a way a certain amount of bearing. He states that there are three types of interstitial nephritis,—all of nervous origin. 1. Elderly people who possess also other symptoms of artero-sclerosis. 2. Young persons with an inherited predisposition to arterio-sclerosis. 3. Young persons with lowered or suppressed development of the nervous system. He believes that the disease is the outcome of a neurosis; the tropic and vaso-motor functions of the nerve cells are disordered, and, as a consequence, alterations of the walls of the blood vessels, the joints and the bones ensue. He speaks of this neurosis

as a herpeticism, and regards it as a distinct disease. One of the consequences of this neurosis, of its trophic disorders, is endarteritis. This given, the rest of the train of the vascular and renal changes develops mechanically.

In the cases of interstitial nephritis from *vascular aphasia* there is the same arterio-sclerosis as in the other forms, although the vascular insufficiency is the prime element in the disturbances which produce this sclerosis instead of an endarteritis arising from trophic failure.

TFST TUBE DIAGNOSIS.

Albuminuria may be organic or functional.

1. Organic albuminuria.—(a) Renal I. Diffused nephritis or Bright's disease. 2. Cyanotic induration of the kidney in heart disease. 3. Degenerative changes in the kidney, as in parenchymatous degeneration, which is the cause of febrile albuminuria and in the lardaceous infiltration. 4. New growths, infiltrations, and parasitis of the kidney may give rise to albuminuria by causing inflammation or irritation. (b.) External renal in which albumin is mainly derived from pus formed in the genito-urinary tract, as in pyelitis, suppurative nephritis, cystitis, urethritis, etc., etc. 2. Functional albuminuria. 1. In derangement of the nervous system. 2. Derangements of digestion. 3. Altered conditions of the blood. 4. The so-called physiological albuminuria.

THE TRANSUDATION OF ALBUMIN.

What leads to the transudation of albumin, or what is the cause that prevents its transudation from the renal capillaries into the urine in health?

Heisbeck, Overbeck, Nussbaum made some experiments that tend to overthrow the former ideas as to the elimination of sugar and albumin. Before their experiments, it was understood that the glomerules separated the watery constituent and that all solids were eliminated by the tubules. Their experiments have proven pretty conclusively that the albumin and sugar are now eliminated by the glomerules. Fothergill said that long years of practice had taught him that it was much easier to find sugar or albumin in the urine than to tell what they signified when found.

320 RIALTO BUILDING.

MODIFIED MILK IN INFANT FEEDING.

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The composition of cows milk is very constant except in the per cent. of fat. This varies from 2½ to 5½ per cent. and is highest in Jerseys and lowest in Holsteins.

This variation of cows milk, like the human female depends upon the period of lactation. The colostrum is much poorer in water and richer in casein, albumen, sugar and salts, the fat being about the same. Cows milk also varies with the kind of food used, good rich nourishing food generally produces a milk richer in fats. On the other hand turnips, residuary liquors

from distilleries, slops from the kitchen, etc., produces a greater flow of water, but reduces the fats, any of these foods fed in a partial state of fermentation as malt from breweries, etc., renders the milk intensely acid from the beginning. Other kinds of foods will impart a peculiar taste to the milk as turnips, cabbage, onions, and the first meadow grass in spring. Some of these articles are liable to render the milk laxative when given to infants.

This illustrates the importance of having the milk supply in infant feeding carefully looked after by inspection of cows by competent veterinary surgeons; the location of dairy food and water supply, and precautions in regard to cleanliness while procuring and taking care of the milk.

From what has been said in regard to the variation in amount of fats contained in milk, it is evident that our milk should be selected from an average herd of good native cattle, then we can be sure of obtaining a good average milk.

Our milk supply being first assured we obtain our "top milk" by skimming off the upper layer after the milk has stood in a jar from 5 to 8 hours. It should be put in the jar when warm from the cow—cannot be poured off. It is thin cream or milk containing an excess of fat.

To obtain 12 per cent. fat take 63 from one quart of milk.

To obtain 8 per cent. fat take 10 oz. from one quart of milk.

Cream contains from 16 to 20 per cent. fat.

About $4\frac{1}{3}$ of 20 per cent. cream can be obtained from 1 quart of milk after standing 24 hours.

By using this top milk which is rich in cream you have a basis for milk modification. This top milk containing 12 per cent. of fat, also contains casein and sugar, varying but little from that of plain milk, therefore when you make your calculations for dilutions you can bring down the albuminoids which is the most indigestible part to a very low limit. As a rule during the first four months infants do better with a little less amount of the fat than 4 per cent. In modifying our milk during the first few months of a child's existence we usually reduce fats a little below the normal limit of 4 per cent. If there be a deficiency in fats supplied, children will sometimes become obstinately constipated, we can often overcome this by increasing our fats.

From experiments which have been made upon pigs it has been found that when fed upon cows milk for one week they grew normally, but when fed upon cows milk from which the fats had been abstracted, they became obstinately constipated, passing hard green stools. A child will pass a considerable quantity of fat in the stools, thus showing one of its purposes to be the relief of constipation.

DIGESTIBILITY OF COWS MILK.

Fat.—Infants can digest about as much as of breast milk.

Sugar.—Infants can digest more than amount present in breast milk. The sugar is added not for the purpose of sweetening as many mothers suppose but for the demands of the system for soluble carbo-hydrates.

Casein.—Infants can digest less than the amount present in breast milk.

This is the most important modification with which we have to deal.

Casein coagulates in firm solid clots, while the albuminoids in human milk present a loose flocculent character. On account of this difference the casein in cows milk should be reduced to a still lower proportion, even commencing as low as one-half of one per cent. and gradually increasing with age.

Salts.—Infants can digest as much as are present in cows milk, therefore in the modification of cows milk it is unnecessary to take into account the salts as the simple dilution with whatever agent you may use to reduce the casein; will accomplish all the results in the modification of the salts desired.

As I have before stated we commence our milk modification by the use of a cream containing a known per cent. of fat, next we have a sugar solution of varying strengths.

One ounce of milk sugar to one pint of water, or one tablespoonful of milk sugar to 5½ ounces of water is a 6 per cent. solution. You can use a 7, 8, 12 or 20 per cent. solution, whatever amount you desire for modifying so as to bring up to the average of human milk. On the other hand if sugar digestion is weak you can make your percentage of sugar very low.

We will now take a review of the tables and see what can be accomplished in the way of milk modification.

Good cows milk.	Dil. 1.	Dil. 2.	Dil. 3.	Human.
Fat 4.00	2.00	1.83	1.00	4.00
Sugar 4.20	2.10	1.40	1.13	7.00
Casein 4.00	2.00	1.35	1.00	1.50

By this table we can see how far below the normal standard simple dilution will make cows milk, without any additions to bring up those ingredients which are deficient.

Top milk.	Dil. 1.	Dil. 2.	Dil. 3.
Fat 12.00	6.00	4.00	3.00
Sugar 4.00	2.00	1.33	1.00
Casein 4.00	2.00	1.33	1.00

We now see in this table by taking a 12 per cent. fat and diluting it two times you have both fat and casein near the analysis of human milk, and you have to only add a sugar solution to bring your ingredients to the proper amount for feeding a healthy child.

Cream	Dil. 4.	Dil. 6.	Dil. 8 times.
Fat 20.00	4.00	2.90	2.22
Sugar 3.80	.76	.54	.42
Casein 3.20	.64	.45	.35

With this table it is practicable to bring your albuminoids down to as low a limit as thirty-five-hundredths of one per cent. By the addition of your sugar solution you can have your fats and sugars near the normal limits.

The following tables I think will demonstrate to your minds conclusively the practicability of modifying cows milk so as to meet every indication both in health and diseased conditions. I furthermore think that its simplicity is such that with a little study you can all comprehend it with but very little trouble. All the ingredients necessary in these formulas will be

- 1st. A cream containing 12 per cent. fat.
- 2nd. A six per cent. sugar solution.
- 3rd. Sterilized water.

		Dil. 5.	Dil. 4.	Dil. 3.	Dil. 2.
Fat	12.00	2.00	2.50	3.00	4.00
Casein	4.00	.66	.80	1.00	1.33
Sugar	4.00	6.00	6.00	6.00	6.00
Dil. 5 times 1st 10 days.		{ Fat 2.00, human 4.00 Casein .66, " 1.50 Sugar 6.00, " 7.00			
Dil. 4 times 10 days to 1st month.		{ Fat 2.50 human 4.00 Casein .80 " 1.50 Sugar 6.00 " 7.00			
Dil. 3 times 1st to 5th or 6th month.		{ Fat 3.00 human 4.00 Casein 1.00 " 1.50 Sugar 6.00 " 7.00			
Dil. 2 times 5th to 9th month.		{ Fat 4.00 human 4.00 Casein 1.33 " 1.50 Sugar 6.00 " 7.00			

These formula are for children with healthy digestion. Now in children with weak digestion or suffering from gastro-intestinal diseases we desire to bring our percentage down still lower, which is often absolutely necessary in many cases. We then commence here with a top milk containing 8 per cent. fats.

"Top milk," fat 8.00, casein 4.00, Sugar 4.00.

	Dil. 7.	Dil. 6.	Dil. 4.	Dil. 3.
Fat	1.00	1.25	1.60	2.00
Casein	.50	.57	.80	1.00
Sugar	6.00	6.00	6.00	6.00

Reduce fats still lower.

Plain milk, fat 4.00, casein 4.00, sugar 4.00.

	Dil. 7.	Dil. 6.	Dil. 4.	Dil. 3.
Fat	.50	.57	.80	1.00
Casein	.50	.57	.80	1.00
Sugar	6.00	6.00	6.00	6.00

Now in this last formula we have our fats down to the one-half of one per cent. For the little one who has an atrophic condition of the digestive organs, we can predigest this one-half of one per cent. of casein with extractum pancreaticum, or we may use barley water, oat meal water, gelatine, etc.

R Milk 3i

Barley water

Sugar solution, 12 per cent. aa ʒijss. M.

The following are a number of prescriptions for different conditions in which I have worked out the exact amount of each ingredient necessary, so that when such prescriptions are sent into a modified milk laboratory it can be readily seen how it is possible to fill them.

For a child 6 months old, infantile atrophy.

R Fat .50 { Plain milk 3 ounces
Casein .50 { Milk sugar 9 drams
Sugar 5.00 { Distilled water 18½ ounces
Lime water 2½ "

Send eight bottles, three ounces each.

Sterilize at 167°. Lime water one-tenth.

A girl 6 years old, duodenal jaundice.

R		Cream, 16 per cent	1 ounce
Fat	.50	Separated milk	42½ "
Sugar	6.00	Milk sugar	4 drams
Albuminoids	4.00	Lime water	4½ ounces

Send twelve bottles, each four ounces.

Lime water one-tenth.

Give four ounces every two hours.

A girl four months old, digestion of casein weak.

R		Cream 20 per cent.	6 oz. and 3½ drs.
Fat	4.00	Milk sugar	2 oz. and 23 grs.
Sugar	7.00	Distilled water	24 oz.
Casein	.75	Lime water	1 oz. and 4½ drs.

Send eight bottles, each four ounces.

Sterilize at 167°.

A boy six months old, sugar digestion weak.

R		Cream, 8 per cent,	24 ounces.
Fat	3.00	Milk sugar	12 drs.
Sugar	4.00	Distilled water	21 oz. and 5 drs.
Casein	2.00	Lime water	2 oz. and 3 drs.

Send eight bottles, each six ounces.

Lime water one-twentieth.

Sterilize at 167°.

In the translation of these prescriptions it will be seen that the modifying clerk in the laboratory requires

- (1.) A cream which contains the fat required.
- (2.) A milk deprived of its fat.
- (3.) A solution of milk sugar.
- (4.) Distilled water.

The methods which I have here given for obtaining the cream or top milk is unnecessary in the milk laboratory, because here a machine known as the cream separator, extracts the cream from the milk, and you can have the cream containing any per cent. of fat desired, and a separated milk with about one quarter of one per cent. fat for your modifying agents, then your milk sugar made any strength desired gives you every thing necessary for preparing a modified milk exactly adapted to every case, provided the physician is competent to diagnosticate the condition of his patient's digestive organs as to proportions required.

The results in infant feeding where modified milk has been the exclusive food is simply astonishing. The statistics here given embrace the first years of the child's existence. 2516 infants of this kind were fed upon modified milk. They were divided into two classes, viz.: The well-to-do and mostly healthy and the ill-to-do and invariably sick.

(1) There were 1519 of the well-to-do class, they had good surroundings, and the constant supervision of a physician. The total mortality in this class has been seven—seven in 1519 or one in 217—less than one-half of one per cent.

The other class comprises 997 babies of the poor. They were all sick, desperately so, here modified milk was used as a medicine. It was delivered

to the infants in their homes. Dispensary and district physicians wrote the prescriptions. The result was

June,	July,	August,	September,	1892—	11½	per cent. mortality.
"	"	"	"	1893—	9½	"
"	"	"	"	1894—	4½	"

This is a reduction in mortality far below that of anything which has ever been offered by any system of infant feeding.

With such statistics as these for your consideration, with a milk which can be modified in a laboratory to suit every individual case, I believe we have arrived at as near a perfect condition as it is possible to attain.

I believe and I might say that I know the profession will give encouragement to any enterprise which has for its object the furnishing of an absolutely pure food for infants. Let us establish a rule by which an accurate known quantity of the different constituents of cows milk are given, and in the right proportion, then we will have an ideally perfect food and the one next to human milk, best adapted by nature to fulfill every indication. I not only make this plea for a modified milk for all infants who are raised artificially, but I especially make it for the sick children with weak digestions in which as a medicinal agent modified milk must be placed first, then all that is necessary is for the physician to write his prescription low in albuminoids and fats, give it to the patient and let him take it to the laboratory and have it filled. If sugar digestion is weak lower the amount of sugar, and in fact every modification can be made with an accuracy that is sufficient for all practical purposes.

In closing this paper I desire to make acknowledgement to Dr. L. Emmet Holt for many of the ideas suggested herein, and some of the tables. I also desire to state publicly that I believe him and Sibert to be the greatest teachers in Pediatrics in America. I also desire to give credit to Dr. T. M. Rotch, of Boston, for many suggestions and tables in using modified milk. Also to Mr. Gordon, one of the proprietors of the Walker-Gordon Laboratory in New York, who kindly showed me through his laboratory and described his methods of filling milk prescriptions.

ADENOID GROWTHS IN THE VAULT OF THE PHARYNX AND THEIR RELATION TO DISEASES OF THE MIDDLE EAR.*

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Mr. President and Gentlemen of the Missouri State Medical Association:

Dr. Meyer, of Copenhagen, Denmark, in the year 1868 first called the attention of the medical profession, in a very exhaustive and convincing paper, to adenoid tissue in the vault of the pharynx. In this paper he pointed out their relation to middle ear disease. His able paper has been followed by many subsequent workers in this important field who have been amply able

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to confirm his observations by abundant clinical experience. Dench in his recent work, justly states, that adenoids in the vault of the pharynx are undoubtedly responsible for more than half of the pathological conditions seen in the tympanum. Clinical experience has proven this to be absolutely correct in the minds of all careful and painstaking observers. Frequently these growths are the cause of deafness in children, the deafness is caused by a breaking down of this tissue, and pus finding its way by the Eustachian tubes to the middle ear which sets up inflammation and suppuration. The deafness may be caused by obstruction at the orifice of the tubes, or extension of catarrhal inflammation into the middle ear by means of the tubes. In the first history of man it is written that in his nostrils was breathed the breath of life, showing conclusively that the nostrils were made for breathing purposes. Pathologists tell us that repeated nasal colds are of an inflammatory character to the tissues, finally become of a harden variety and the vault becomes obstructed. The disease is much more prevalent in a cold moist climate.

Some observers claim that the limphoid tissue is very apt to be left inflamed as a sequella of scarlet fever, diphtheria or measles, and the adenoids arise from these conditions. This may and often is the exciting cause. Still I have frequently seen children perfectly healthy every other way, never having had any of the diseases of childhood to be afflicted with adenoid tissue in the naso-pharyngeal vault. A few observers divide post-nasal growths into more than one disease, that is hypertrophy of the pharyngeal tonsil, and adenoid vegetation. This I believe to be two forms of one disease situated at the vault of the naso-pharynx of children. The symptoms are so very characteristic that to overlook the disease is scarcely ever pardonable. These little patients are generally pale and weakly. The nostrils are pinched and frequently the thorax will be drawn in. There seems to be a cold in the head. The voice was called dead by Meyer, because it is nasal, accompanied by discharge of muco pus into the fauces. In other words this condition gives rise to a train of symptoms which are mostly mechanical occurring mainly in young persons. When the adenoids are sufficient in number and size the entire vault becomes obstructed and the mouth will be held open all the time. During the night these cases snore and breathe loudly. Their teachers at school consider them stupid and inattentive children. They take cold in their noses on the slightest change of temperature and the nose will discharge mucous nearly all the while.

In fact the child presents all the appearances of being exceedingly dull and stupid. The snoring and the mouth breathing is never a habit, but is due to the obstruction of the nose, which forces the child to hold its mouth constantly open in order to breathe. The inattentive condition is brought on by the impairment of hearing due to obstruction of the Eustachian orifices or catarrhal inflammation. In nearly all such cases there will be a history of recurrent middle ear disease. It is exceedingly difficult for such cases to blow their noses. Dr. Meyer said that a deaf child who breathes through the mouth and has a thin compressed nose, is affected with adenoid growths in the

naso-pharyngeal cavity. It is not necessary to wait until permanent deafness has resulted. When a child is scolded at school for being inattentive, with its mouth constantly open, snoring at night, with a tendency to bronchitis, nose and ears discharging, such cases should be examined by a skillful rhinologist for adenoid tissue in posterior nares. This subject should be of interest to every physician who has to deal with children. This disease is much more common between the ages of 2 to 14 years. It is with a great deal of personal satisfaction to know that the ear is now not only viewed through the aural but the rhinoscopic mirror and nasal spectrum as well.

Both Bosworth and Dench consider this subject very carefully in their recent works. It is sometimes called hypertrophy of the pharyngeal or Luschkas tonsils. In a few of these children by great care and patience one will be able to see these growths by means of the mirror. The great majority of such cases will never allow a physician to insert a mirror, be it ever so small into their mouths. In all such cases, the index finger may be inserted behind the soft palate in perfect safety and these growths can be distinctly felt. In fact a perfect diagnosis can be made by means of the index finger alone.

The hard-of-hearing, mouth breathing child is stupid and dull at work and play. There seems to be a cold in the head all the time. The voice seems to be dead, it is nasal. In other words this condition gives rise to a train of mechanical symptoms caused by the nasal obstruction. The faucial tonsils frequently are enormously enlarged, they should be excised first. The treatment may be divided into local and surgical. As a rule the local treatment is of very little good. The application of chemicals and the galvanocautery can occasionally be used successfully under local anaesthetics. In early childhood when the growths are soft they may be scraped off with the finger nail. In older children the adenoids are much harder, and it now becomes necessary to use snares, forceps, curettes or cautery. I have seen a few operators have these little children firmly held by strong assistants while these growths were rapidly removed amid screams and struggles. I could never resort to such cruel measures, the patients are badly frightened and never like physicians afterwards.

In my experience the surgical treatment is by far the best and gives the most satisfactory results. Most every laryngologist has some special instruments such as snares, forceps or curettes that he is in the habit of using in these cases. The method should be only used which causes the least danger to the child and which promises the very best results. If these little patients are otherwise healthy it seems that chloroform or ether should be always administered. It is never necessary to produce profound anaesthesia, only enough should be given to produce semi-narcosis. Everything should be ready before the anaesthetic is given in order that the operation may be done quickly when the patient is only partially under the anaesthetic. It only takes a few moments to complete the entire operation; here rapidity is very necessary. As a rule there is a great deal of blood lost during the operation, which owing to its nature is rather difficult to prevent. I always give my patients anaesthetics in the manner already described, much better and more rapid work can be done in that state.

The instruments are immersed in boiling water and every detail of the operation is done before the anæsthetic is given. The child is now placed on its back on the operating table, the head should be allowed to hang from the edge of the table during the operation in order that the blood may flow from the nose and mouth. If the patient is a girl her hair should be covered by oil silk to protect it from the blood. O'Dwyer's mouth gag should be first inserted well back on the left side and firmly held by an assistant. The operator stands on the right side, his left fore finger is now inserted behind the soft palate, as a guide for the curette, forceps or any instrument the operator may elect to introduce with the right hand. I always use the heart-shaped curette of Gottstein and while in this condition very rapidly remove the adenoids from the vault of the pharynx. The flow of blood is quite sharp and copious but as a rule it soon ceases after the growths have been removed. During the operation it can be easily wiped out of the mouth by means of cotton or sponges. Immediately after the operation is finished the gag should be removed and the patient turned on the side, being only partially under the anæsthetic they will now cough and spit out any blood which otherwise might enter the larynx. You now see what my object was in only giving a very little anæsthetic, to have the assistance of the patients in keeping blood from entering the larynx. It will be only necessary to confine these patients to bed for a few days. For about one week afterwards there may be a little bloody discharge from the nostrils. A mild antiseptic ointment or spray should be used, which should always be pleasant and refreshing to such patients; this will consist of about all the after-treatment necessary.

In doing this operation it is well to always bear in mind how much harm and danger blood entering the larynx and trachea will cause. If the patient is only partially under the anæsthetic there will be absolutely no danger in that respect because they will cough and spit it out. The operation is one, when carefully done is very apt to bring rapid and wonderful improvement. The hearing improves, the snoring and mouth breathing becomes things of the past, the stupid inattentive condition disappears, in fact the general health rapidly improves. There is absolutely no danger following it when done carefully. It will bring great satisfaction to the physician and save very many children from being deaf, by preserving countless drum heads and troublesome middle ear disease.

Report of two cases operated on for adenoids in vault of pharynx.

December 20th, 1894, Mr. S., a Kansas City attorney brought his little son to me to have something done for the mouth breathing and loud snoring at night. This bright boy was 10 years of age. Family history good, had never been sick. On examination I found the child was only able to hear the voice when very near, and watch not at all. The faucial tonsils were very large. As this child was old enough to allow the mirror to be inserted into the mouth I was able to get a very good view of the vault of the pharynx, which was found to be filled with adenoids. The condition was explained to the father and boy too, they both were anxious to have the operation done. Next morning Dr. C. P. Cathcart, the family physician, administered chloroform. I first excised the faucial tonsils and by means of Gottstein's curette the adenoids were

rapidly removed. This boy was entirely well in one week. The mouth breathing, snoring and hard of hearing had left him completely.

March 1st, 1895, F. S., a little French girl was brought to my office, age 4 years. She presented all the typical symptoms of a child with adenoids in vault of pharynx. Her mouth was constantly held open, she snored at night, nostrils pinched, chest badly drawn in. She was sent to St. Margaret's Hospital and with the assistance of my friend, Dr. T. L. Bennett, chloroform was given, and I operated on her in the manner already described. The flow of blood was considerable in this case, but soon ceased after the operation. As she was only partially under the chloroform she was able to cough and spit this blood out. She was confined to bed only two days, and then allowed to walk around the ward; in one week she was sent home with all the unpleasant conditions named relieved.

Dr. Bennett has kindly assisted me in several of these cases.

The last week in April I operated on a little girl from the southern part of this state, kindly assisted by Drs. Willis P. King, Jenkins and Neff. The operation was successful and relieved the little girl completely.

DIARRHEAL DISEASES OF CHILDREN.*

BY C. S. MERRIMAN, M. D., KANSAS CITY, MO.

Professor of Diseases of Children in the University Medical College.

Gentlemen:

According to our latest nomenclature we have the diarrheal diseases of children divided into three classes or sections, viz.: first, simple diarrhea; second, acute mycotic diarrhea, which is sub-divided into acute dyspeptic and cholera infantum, and third, enterocolitis. Simple diarrhea occurs in children previously well, with good digestion, as the result of overfeeding or an improper article of food, exposure to excessive heat, from drinking too much cold water, etc., the child having no constitutional disturbances. All we need to do in such cases is to correct the error in diet, give something to remove the irritation from the alimentary canal, such as castor oil, syrup of rhubarb or the mild chloride, then a small dose of some form of opium to check the increased peristalsis.

The acute mycotic diarrhea or that form due to a germ is of more serious nature. In every normal stool we can find several kinds of germs, but in the mycotic diarrhea we find still other varieties of germs. This variety and all others except the simple form usually occurs in bottle fed babies, and most frequently during the warm season. We will now consider the first sub-division of the mycotic form, viz.: the acute dyspeptic diarrhea. This form is nearly always caused by errors in diet coupled with the depressing effects of heat. In the first place bottle fed babies are fed too much and yet never seem satisfied. The reason for this is that they seldom receive a food which they can perfectly digest, hence their hunger is not appeased. They fret and cry, more food is given and more frequently, thus making the trouble worse. By continually taking food in improper quantity and quality they soon weaken the digestive powers that previously existed and by and by the glands that

*Lecture delivered to the Post-Graduate class at the University Medical College, April 1st, 1895.

supply the digestive fluid almost fail to respond to the stimulus of food. With this undigested food in the alimentary canal and the depressing influence of heat we have decomposition. The germs present producing a ptomaine which enters the system and we have constitutional disturbance. The stools are frequent, foul smelling, of various colors, but usually some shade of green, which is due to the presence of biliverdine, to a green pigment producing bacillus or to an alkaline condition of the small intestine (the normal reaction being acid) though the feces may be neutral or acid when voided, due to the acid secretions of the colon. The weight of authority seems to be in favor of the latter.

When the diarrhea continues long enough to produce organic changes we find the lesions usually in the large bowel. When we have blood in the stools the lesions are in the large bowel and lower ileum, the lesion which produces the slight hemorrhage is in the ileum.

Treatment.—Mild cases are not hard to handle. I will speak of the more severe form. First withdraw all food for a few hours. Give about six doses each containing half grain of calomel and one fifteenth of a grain of opium. A dose should be given every hour and a half or two hours. The calomel checks the nausea, is an antiseptic, by its cathartic effect removes all irritating substances and stimulates all the glands which secrete digestive agents which have been more or less inactive. The opium lessens peristalsis and quiets the nervous system. When the calomel acts would place the child on its back with hips elevated and give an enema of lukewarm water with drachm of salt to the quart. The salt will render the water less irritating and aids in osmosis, which is very important, for the blood has been drained of quite a considerable amount of its watery element. The enema should be given at least once in twenty-four hours until the diarrhea is checked and should be given by the physician or a nurse. The enema can be made much more effective by attaching to the syringe a soft rubber male catheter. Introduce it into the bowel, throw in a little water, push the catheter a little farther then allow more water to enter and so on, always keeping the bowel full of water ahead of the catheter and thus it will not strike the side of the bowel and be turned back upon itself. By being careful will have no trouble in pushing the catheter above the sigmoid flexure. By this you will fill the large bowel over to the ileo-cecal valve and wash out scybala impregnated with germs from various sacculi of the bowel, otherwise just about the time you were congratulating yourself that your patient was well it would have a relapse. We now have the alimentary canal in as good a condition as we can get it and desire to commence the administration of some food and medicine. The food which the child had been taking is the one to now be avoided for awhile. If the child had been taking milk the decomposition of the undigested portion gave rise to a certain germ or germs peculiar to milk fermentation. If the germ continues to be supplied with proper media or soil it will continue to reproduce itself and its ptomaine. But if it be placed in a media not adapted to it, it will soon die. Now what we wish to do is to starve out the little fellow by withholding all milk for a time and giving starchy food such as crushed soda cracker in hot water with a little whiskey added, arrow root or rice, etc. After the diarrhea is checked

we can return to the milk but should be very careful as to quantity and quality, at same time should give an opiate to lessen peristalsis and give intestinal antiseptics such as arsenite of copper, sulpho-carbolate of zinc, oil of cinnamon or bismuth. In some cases we do not have an inflammation in the bowel but a congestion and an increased function. In such cases atropia acts nicely by dilating the arterioles in the skin, drawing the blood from the intestinal tract, thus equalizing the circulation. Atropine by paralyzing the nerve endings has a decided sedative effect on the muscular coat of the bowel.

[TO BE CONTINUED.]

EDITORIAL NOTES.

THE VALLEY OF SALT RIVER, ARIZONA seems to be especially suited to the prevention and cure of consumption. The altitude (1100 feet) is so low that cases that are subject to hæmorrhage do well. The air is very dry and the temperature favorable. We quote some opinions below that should throw light upon this country.

Dr. Harrison E. Stroud writes in the *Phoenix Gazette*: "Arizona is a large Territory. Within its borders every possible altitude exists, from but 12 feet above sea-level, as at Yuma, to eternal snow in the mountains. It is difficult to appreciate that one condition exists in all these regions, regardless of altitude, namely, dryness. This fact is proved by not only Government observations, but by the testimony of the entire population.

The dryness is perpetual; dead animals dessicate, so also does refuse matter. It is this dryness, with entire absence of dew and fog, that makes it desirable to sleep out of doors from May until October; and many sleep out the year round.

The winter climate is delightful. It seldom frosts and never freezes. One bright sunshiny day follows another. Rains occur monthly between December and February, but entirely insufficient for agriculture. The days are warm and pleasant, the nights cool and exhilarating, the country green and pretty. Flowers bloom, and oranges as fine as any in the world ripen. Such a winter climate is pleasant and beneficial; but it is the heat of summer that is especially curative. This heat is peculiar; it is never oppressive except after one of the infrequent rains; at other times the great dryness makes the heat tolerable, or even comfortable. So little illness of any kind occurs in summer that 'physicians alone are sick.' "

J. T. Moriarty says of Phoenix, Arizona, the central city of this great valley: "During the year ending June 30, 1894, we had 225 cloudless days, 84 partly cloudy and 56 cloudy. The highest average temperature of any month during the year just named was that of July, 82.30 degrees. The lowest was that of January, 47.20 degrees. The air is pure, dry and bracing. It is true the weather is at times very warm in June, July and August; but during the rest of the year it is generally all that could be desired. July is, as a rule, our warmest month and December our coldest. The thermometer rarely ever sinks to the congealing point, and when it does so it never continues there long enough to freeze ice more than an eighth of an inch thick, and this, in turn, never withstands the effect of our glowing sunshine over two or three hours."

Granville Malcolm, of Denver, an experienced traveler and a winter visitor of several seasons to the Salt River Valley, expresses his favorable opinion of this region as a winter resort in the following letter: "Much has been said about the climate and healthfulness of the Salt River Valley. But I have seen no opinion as to the advantages of this as compared with other favored resorts.

Having spent several winters in Colorado, three in California, one in Florida and

Cuba, one in Texas, parts of three winters in Phoenix, part of one winter in Thomasville Ga., and New Orleans, and one winter on the Riviera in the south of France and Italy, my judgement without bias is strongly in favor of this valley as a winter resort, having a climate surpassing each of those named.

Wm. H. January, of Chicago, writes concerning Arizona in general. "It was my good fortune to spend the greater portion of last year in Arizona, actively engaged in the examination of land surveys for the United States Government.

Constantly exposed to the sun during the entire summer, sleeping in the open air from June until December, I found the climate of Arizona the most delightful anyone could well imagine.

The winter climate of Arizona as compared with southern France and Italy is far superior. There are no cold winds, no moisture in the atmosphere, and the sunshine gives strength and vigor to those who cannot brave the terrors of a northern and western winter. I spent many days walking and riding over the deserts and mountains of Arizona in the hottest weather, but never did I experience the slightest discomfort."

No doubt the future will contribute much to the development of this territory in this connection as the past has to Colorado and New Mexico. Low altitude, dry air, and mild climate are very remarkable combinations and very valuable ones.

ABORTIVE TREATMENT OF ERYSIPELAS.—Dr. W. H. Delvett, of Cincinnati, writing in the *Lancet-Clinic* thinks erysipelas can be aborted. He uses the above heading and says: "I don't know that I am strictly warranted in using this term, for I doubt whether there is, or can be, such a thing as aborting erysipelas, and yet I do believe the treatment I have adopted for the past twelve months comes as near to it as possible. I have treated in all eight cases, the average duration being a little less than four days. Five of the eight cases were facial, the remaining three of the lower extremities. The following formula was used in each individual case.

R	Ichthyol	-	-	-	-	3iiss
	Collodion flex	-	-	-	-	3ias—M

This was directed to be applied every three hours, always commencing the application about one inch beyond the line of demarcation between the healthy and inflamed skin. I believe this to be of the greatest importance. By adopting this method you will in nearly every case prevent the spread of the disease. The strength of the solution can be varied if thought best, but after several trials I have found the one suggested the more reliable. A great deal will also depend on the quality of the collodion. If good it will not crack and peel off in a few hours, but, on the contrary, will adhere firmly for some time, affording a perfect protection to the surface. In case it becomes loose and partially detached from the surface it should at once be removed and followed by a fresh application. At no time should the surface be left exposed longer than possible."

PRESCRIPTIONS FOR ASTHMA.—

Chloroform	-	-	-	-	dr. i
Ether	-	-	-	-	dr. iss
Syrup acaciæ	-	-	-	-	dr. iv
Tr. cardamom Co.	-	-	-	-	dr. i

M. Sig.—A teaspoonful every half hour until relief is obtained.

Ammo iodidii	-	-	-	-	dr. ij.
Ext. grindelia rob. fl. d.	-	-	-	-	ss
Tr. lobeliæ	-	-	-	-	} ss dr. i
Tr. belladonnæ	-	-	-	-	
Syrup pruni virg.	-	-	-	-	dr. i
Aq. dist.	-	-	-	q. s. ad.	3ij

M. Sig.—Teaspoonful three times a day.

—Med. Review.

FOR PROTRACTED LABOR.—Dr. Richards Gray, Hythe, Kent, England, in *The Medical Summary*, states that he has used the following ointment to very great advantage in rigid os and protracted labor.

R	Best plug tobacco	-	-	-	-	3 iij
	Fresh lard	-	-	-	-	lbs iss
	White wax	-	-	-	-	3 ii

Mix. let simmer slowly for an hour or two, strain and let cool and it is ready for use.

Sig.—Apply *ad. lib.* to os, neck and vagina walls.

The *Journal of Materia Medica* reproduces the above and states that it is not new but valuable. Who has tried it?

BURNS, SCALDS AND FROST BITES.—Dr. T. S. K. Morton has reduced the treatment of burns, scalds and frost-bites to a simple yet very effective method. Whether the patient is seen immediately following the injury or after some other form of treatment has been resorted to, the part is first immersed for several minutes in a two per cent. solution of carbolic acid; this being anesthetic is well borne, is less irritating than mercuric chlorid solution, and more effective if any oily substance has been previously applied. Blisters are pricked, the part is sprayed with a solution of hydrogen dioxid and covered with strips of Lister protective which have been moistened in the carbolic acid solution. Over that the usual sterilized gauze and bandages are applied. Acetanilid may be lightly dusted on under the protective, and sometimes seems to have happy effect. The dressings are removed and fresh ones applied with the same regard to antiseptis every other day.—*Polyclinic*.

THE TREATMENT OF LUMBAGO carried out in the clinic of Dr. S. Solis-Cohen is as follows: If the pain is severe the patient receives an injection of atropine sulphate (1 milligram = grain 1-64), or atropine sulfate (1 milligram) and morphin sulfate (1 centigram = grain 1-6), the needle being inserted up to its hilt into the painful muscle. Directions are given as to diet, clothing and personal hygiene, and the following mixture prescribed:

Sodium salicylate	-	-	1 ounce
Potassium iodid	-	-	2 drams
Compound sirup of sarsaparilla	-	-	1 1/2 fluidounces.
Water sufficient to make	-	-	8 fluidounces.

Mix. Dose.—A teaspoonful in water thrice daily, after meals.

Under this treatment recovery was, as a rule, very prompt. A few cases that proved refractory seemed to be benefitted by sodium bromid given in 2 gram (30 grain) doses, three times a day. Other cases received ammonium chlorid 1 gram (15 grains), three times a day.—*Polyclinic*.

TREATMENT OF INDIGESTION.—A prescription that has given good results in the treatment of indigestion in Dr. Griffith's clinic is as follows:

Oil of cloves	-	-	2 or 3 minims.
Diluted hydrochloric acid	-	-	15 minims.
Tincture of nux vomica	-	-	20 minims.
Compound tincture of cardamom	-	-	2 fluidrams. Mix.

To make one dose, given before meals, thrice daily.

The oil of cloves is a most useful carminative. The dilute hydrochloric acid supplies the gastric deficiency. The nux vomica acts well as a tonic, and the cardamom is an agreeable vehicle. If there is much pain, about three minims of spirit of chloroform is a useful addition for its local anodyne and carminative action. If acid eructation is severe, sodium bicarbonate (grains 10) is given instead of the hydrochloric acid. This neutralizes the acids of fermentation that are formed. If there is attendant constipation, half dram doses of fluid extract of cascara are given at bed time. With the diet regulated, and when possible, other faults in the mode of living corrected, this line of treatment is eminently satisfactory.—*Polyclinic*.

A BALLAD OF THE HYGIENIC PIE.—

Give me a spoon of oleo, ma,
And the sodium alkali,
For I'm going to make a pie, mamma,
I'm going to make a pie;
For John will be hungry and tired, ma,
And his tissues will decompose—
So give me a gramme of phosphate,
And the carbon and the cellulose.

Now, give me a chunk of casine, ma,
To shorten the thermic fat;
And hand me the oxygen bottle, ma,
And look at the thermostat;
And if the electric oven's cold,
Just turn on half an ohm,
For I want to have supper reody
As soon as John comes home.

Now, pass me the neutral dope, mamma,
And rotate the mixing machine,
But give me the sterilized water first
And the oleomargarine,
And the phosphate, too, for now I think,
The new typewriter's quit,
And John will need more phosphate food
To help his brain a bit.

—Ex.

LITTLE ITEMS.

Dr. John Punton has returned from his European trip.

Dr. Wm. J. Rogge, of Portland, Oregon, has moved to 280½ Grand Ave.

Dr. J. A. McKenzie, of El Dorado, Kansas, is still lame from a fall from his bicycle last winter.

Dr. J. Ambrose Talbott is spending the summer at Jefferson City. He will return in time for school work this fall.

New Hampshire has at last joined the ranks of the States having legal regulations relating to the practice of medicine.

Dr. John B. Shoemaker, editor *Medical Bulletin* has received the degree of LL.D., from Dickinson College, Carlisle, Penn.

Our readers will find three editorial notes taken from (and credited to) the *Philadelphia Polyclinic*. They are excellent notes.

A Paris savant has discovered an infallible law by which the paternity of children, having no acknowledged father, may be ascertained.

The *Medical Record* tells of a frightful remedy for coryza; insufflations of iodoform into the nostrils and tablets of iodoform dissolved in the mouth and swallowed!

Dr. Carl Beck, of New York says that almost any surgical operation can be done in the patient's room as well as in a hospital, so complete are our present methods of asepsis.

The *Medical Times* records a case of dislocated liver. The dislocation was reduced by gentle pressure, and held in place with an elastic bandage. Some weeks after, the liver was in its normal condition,

Dr. L. Rozenwald has been appointed Bacteriologist to the City Board of Health. The Doctor was identified with the work of the diphtheria commission last winter, doing the bacteriological work with credit and satisfaction.

The fee for a professional visit in Nottingham, England, is one shilling, according to a correspondent of the *Medical Times*. Even then the medical man often has to take it out in trade with the small shop-keepers, who refuse to pay such exorbitant charges in cash.—*Medical Record*.

William Hill, of London, uses menthol in hay fever as a substitute for cocaine. A ten or twenty per cent solution in oil is sprayed over the sensitive area.

Dr. Frank Smiley has returned from post-graduate study in genito-urinary surgery in New York, and will occupy his former position with the anatomy department of the Kansas City Medical College this winter.

Dr. W. C. Burke, formerly at 14th and Tracy Ave., Kansas City, Mo., has located at Los Angeles, Cal., for practice. His address is Broadway, corner Third St. The many friends of the doctor wish him success in his new field.

J. Hewton Hunsberger writing in the *Medical and Surgical Reporter* for June 8th, 1895, says: "If ever human life is prolonged by the use of a drug—and the question say the least is debatable—digitalis stands at the head of the list."

Appendicitis is so fashionable a disease says *Life*, and so closely governed by social rules, that when a wealthy member of New York's "400" was operated upon lately, her appendix was found to contain nothing less than a pearl.—*Clinic*.

Dr. H. C. Harris, of Paris, Miss., communicates the following formula for constipation to the *Louisville Medical Monthly*:—

R	Aloes, socotrine,			
	Ext. hyoscyam.	- - -	ââ	gr. xij.
	Quin. bisulph.	- - -		gr. vj.
	Ferri. sulph.	- - -		gr. vj.
M.	Flat mas. in pil. no. xij.			Div.

—*Ex.*

The University Medical College has made the following changes in its faculty. Dr. Jabez N. Jackson becomes Adjunct Professor of Anatomy, Dr. Chet. McDonald becomes Assistant to the Chair of Theory and Practice of Medicine, Dr. V. W. Gayle becomes Professor of Therapeutics, and Dr. I. J. Wolf Professor of Bacteriology. Dr. T. C. Proctor is made Assistant Demonstrator of Histology, and Drs. H. M. Downs. E. G. Blair, J. P. Kaster are elected Demonstrators of Anatomy. Dr. Charles Wilson becomes Chief Demonstrator of Anatomy.

The faculty of the College of Physicians and Surgeons of Kansas City, Kansas, has been re-organized and now contains, among its new members, Drs. C. B. Hardin, Chair of Practice; Dr. Newton McVey, Chair of Microscopy and Histology; Dr. J. B. Jones, Chair of Nervous Diseases; Dr. John Kyger, Diseases of Children; Dr. H. A. Longan, Demonstrator of Surgery; Dr. Willis P. King, Railway Surgery, and Dr. Thomas L. Bennett, Anæsthetics and Anæsthesia. This practically makes a new college of it, and the recent move of the Methodist College of Kansas City, Kansas, assures its permanency and support.

The Kansas City Medical College has several new names on its roster this year. Dr. C. E. Clark is made Clinical Professor of Laryngology, Dr. T. J. Beattie becomes Clinical Professor of Diseases of Women, Dr. J. B. Connell becomes Professor of Materia Medica and Therapeutics, Dr. Frank W. Rathbone having resigned. Dr. T. B. Thrush and Dr. P. P. Trueheart become Demonstrators of Anatomy, Dr. Geo. M. Gray is appointed Chief Demonstrator. Dr. Leo. A. Schaeffer remains as Professor to the Chair of Anatomy. Alexander New, Esq., accepts the Lectureship on Medical Jurisprudence. The College has appropriated \$10,000 to enlarge its buildings and more for new equipment.

Cases presented at Genito-urinary and Venereal Clinic, University Medical College, by Prof. G. W. Davis, session 1894-95. Balanitis 3; bladder, atony 2; bladder, irritable 2; bubo 22; calculi, renal 1; chancre 11; chancroid 19; condyloma 7; cystitis, acute 7; cystitis, chronic 4; enurnsis 5; epididymitis 15; epithelioma penis 1; fistula, urinary 2; hematocele 1; hematuria 2; hypospadias 1; hydrocele 2; gleet 27; gonorrhœa 58; impotence 5; orchitis, syph. 3; prostatic hypert. 11; prostratis, acute 1; prostratis, chronic 12; prostaticorrhœa 1; penitis 1; pashitis 1; phinosis 11; paraphimosis 3; rheumatism, syph. 3; spermatorrhœa 1; stricture 15; syphilis, early 29; syphilis, late 54; testicle, undescend. 1; urinary, exdeav. 1, varicocele 3; total 348.

Pepsin is undoubtedly one of the most valuable digestive agents of our *Materia Medica*, provided a good article is used. Robinson's Lime Juice and Pepsin, and Arom. Fluid Pepsin, (see page 10, this number) we can recommend as possessing merit of high order. The fact that the manufacturers of these palatable preparations use the purest and best Pepsin, and that every lot made by them is carefully tested, before offering for sale, is a guarantee to the Physician that he will certainly obtain the good results he expects from Pepsin.

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ORIGINAL ARTICLES.

SOME CLINICAL NOTES ON THE SO-CALLED ALKALOIDS OF COD-LIVER OIL.

BY JOSEPH M. PATTON, M. D., CHICAGO, ILL.

Professor Internal Medicine in the Chicago Policlinic.

Some time ago I began clinical observations on the use of the so-called alkaloids of cod-liver oil, with the view of determining whether the effects of these much exploited substances were reliable, and to be compared in utility to the oil itself, as we are at present able to administer it.

The cases selected comprised chronic catarrhal conditions of the lungs of various associations; various grades and types of pulmonary tuberculosis; chronic rheumatism; anemia; also mal-assimilation associated with catarrhal disturbances the digestive tract.

The results have been such as to interest me to a certain extent in the current dispute as to the nature and derivation of these alleged alkaloids.

The chemical investigation of cod-liver oil dates back to 1822, since which time there have been upwards of twenty investigators whose experiments were, for a time at least, more or less authoritative and each of whom discovered something to which he attributed the specific virtues of the oil.

The most of these observations are only of historical interest at present, and it would be useless to recount them.

Aside from the claims of morrhuol as advoted by Chapoteau, to be considered as the active principle of cod-liver oil. we are chiefly interested in the investigations of Gautier and Mourgues. It is not necessary to recount the various substances which these observer found in cod-liver oil, the results of their investigations have been scattered broadcast. The therapeutic results are, however, said to be mainly due to the presence of morrhuine and morrhuic acid (gaduine.)

The recent investigations of Heyerdahl have resulted in the discovery of two new glycerides,—therapin and jecolén, also a small amount of palmitic acid.

Möller points out that Heyerdahl's experiments would show that the fats of the oil which solidify at a low temperature, contain neither stearine or palmatin, but are glycerides of new unsaturated acids not yet understood; that rancidity is due to the formation of hydroxy-acids and not to the free acids; that the value of the oil lies in the contained free acids in the form of glycerides, and that these free acids must be preserved absolutely unchanged.

Möller, along with other opponents of the so-called alkaloids, claims that there are no alkaloids found in the oil from perfectly fresh livers, and that they are plentiful in proportion to the extent to which decomposition has occurred, and that they are, therefore, poisonous ptomaines.

On recent physiological data, Möller reasons out a natural selection on the part of lecithin in the economy, for these newly discovered therapeutic and jacoic acids, and claims that the therapeutic virtue of the oil depends on maintaining the integrity of these glycerides in the natural oil by certain improved methods (Möller's), and that there is no active principal in cod-liver oil which can be isolated,

In Heyerdahl's examination for ptomaines, after the method of Gautier and Mourgues, using the light colored raw medicinal oil, he concludes that ptomaines have not had time to form.

Gautier and Mourgues classify the alkaloids discovered by them as katabolic products formed during life (leucomaines.)

Möller claims that these products cannot be found in steam prepared oil, but only in oil in which there has been opportunity for decomposition to occur, —the light brown oil. In the case of the darkee oil the temperature at which it is prepared volatilises these substances, and, therefore, they are absent.

The clinician in searching for facts in the various investigations of cod-liver oil, will get somewhat mixed.

On the face of chemical arguments, the opponents of the alleged alkaloids appear to have the best of the discussion. However, most of the arguments both pro and con are clouded with the appearance of commercialism, and must be taken for what they are worth.

On the other hand, there are numerous reports on the clinical use of the so-called alkaloids giving favorable results, and while the majority of these reports appear to have been made on rather superficial observations, some credit must be given them.

On account of the difficulty of administering cod-liver oil, I have for several years discarded its use.

The clinical exhibition of the so-called alkaloids was undertaken with the view of determining their value, if any as a substitute for the oil itself. The preparation used was Stearns' wine of cod-liver oil which is said to contain the alkaloids as isolated by Gautier and Mourgues.

During a period of eighteen months this preparation has been administered to about seventy-five patients, private and clinical. The duration of treatment varied from three weeks to four months continuous administration, in each case. Some five or six cases have been more or less continuously under treatment for over a year.

The nature of these cases has been already stated, and with the exception of two or three cases of gastro-intestinal troubles, were all such as are eligible for the administration of cod-liver oil.

The general result noted in all such cases was increased facility in digestion and assimilation and corresponding gain in strength and weight with an improved appetite.

The specific result noted in different classes of cases were as follows: In chronic bronchitis, either occurring alone or as complicating emphysema, asthma, or tubercular conditions, besides the improvement in nutrition, there was more or less improvement in the bronchial catarrh, with lessening of cough and expectoration, especially in some cases of obstinate localized bronchitis in the lower lobes, where persistent treatment with the usual alterative and expectorant remedies had accomplished little, was there satisfactory improvement under the use of wine.

In some of the most chronic cases of localized bronchitis guaiacol was also given, though this was not usually done unless tubercular development was present or was considered as imminent.

In the cases of pulmonary tuberculosis, guaiacol was given in addition to the alkaloids, because while there was improvement in the digestion by the wine alone, and these patients expressed themselves as feeling much better, there was relatively much more improvement in the cough, fever, night sweats, and associated catarrh when the guaiacol was given.

The general improvement in some of these cases, especially in the early stages, was quite marked. The wine was used as a menstrum for the guaiacol unless the odor of the latter was objected to, in which case it was given separately.

The guaiacol is dissolved in an equal quantity of alcohol and added to the wine, five drops of guaiacol in a teaspoonful of wine was usually given three or four times daily. Larger doses of guaiacol were seldom given, as in our experience patients do as well or better on small doses than where the guaiacol is pushed to the limit of toleration.

In cases of anæmia in young girls treated with the wine alone, there was general improvement in the appetite and strength, with marked improvement in the gastric disturbances incident to these cases.

The percentage of hæmoglobin, however, showed slight or no change, and functional hæmic murmurs were persistent.

The improvements in these cases on the alkaloids alone was temporary, and they relapsed unless placed on more energetic treatment with iron.

In chronic rheumatism, beyond the general improvement in assimilation and nutrition, there was little result.

In cases of mal-assimilation from faulty intestinal digestion there were satisfactory results.

The best results from the wine alone was noted in the cases of chronic bronchial catarrh, such as usually respond to treatment of iodine in some form.

It is admitted that the small amount of peptonate of iron contained in

the wine, and even the wine itself, would, to an extent, be beneficial; but some of the results were not in conformity to the probable effects of such medication, especially in view of the fact that in some of the cases tonics and stimulants had previously been administered without satisfactory results.

The following clinical histories illustrate the above statements:

CASE I.—Girl seven years old, chronic bronchitis for four years. Better at times while under treatment, but never without cough and expectoration. Has lost flesh, weight thirty-five pounds. Has had more or less continuous treatment during entire period of disease, with great variety of remedies. Mother states that she has improved most when taking cod-liver oil which she takes well, and of which she has had various preparations of pure oil and emulsions; her cough, however, never entirely ceased under its use. Has acquired quite a liking for stimulants owing to their continued administration. For the last month has been taking creasote.

Examination.—Temperature 101, pulse 120. Both lungs full of large and small mucus rales from apex to base. At the middle of the posterior border of the right scapula near the surface of the lung, there is a spot of consolidation about as large as a half dollar.

Diagnosis.—Lobular pneumonia complicating chronic bronchitis.

On account of her previous experience with cod-liver oil, it was considered an excellent case for a trial of the so called alkaloids, especially as she had previously taken both iron and stimulants of various kinds.

She was given two teaspoonfuls of the wine of cod-liver oil four times daily, and placed on milk diet.

In two weeks the appetite was much improved, cough less. The spot of consolidation had nearly cleared up, the latter result, of course, not being attributable to the remedy.

The medicine was faithfully taken for four months. At this time there was not a rale to be heard in either lung, and she had gained four pounds in weight. The cough had ceased, appetite good. Six months later her weight was 42 pounds.

CASE II.—Woman 32 years old. She claims sickness for three months only, with cough and some fever, slight irregular night sweats, no appetite, bowels irregular. Temperature 100½ F. Pulse 100.

Examination shows consolidation of the left apex, anteriorly as low as second interspace, below this mucus rales as low as fourth rib. Sputum contains bacilli. Right lung normal.

She was given a tablespoonful of wine of cod-liver oil containing five drops of guaiacol, three times daily.

A month later considerably improved in strength and appetite. According to her statement, night sweats absent, cough much less. No rales below area of consolidation, in which no change is apparent. Temperature 99.3-5. Pulse 90.

Patient considers herself much better, though with exceptions noted above there is little change in her condition.

CASE III.—Young woman, 19 years old; sick for over a year, never strong. Menstruation scanty and irregular, appetite capricious, with considerable gastric disturbance without pain in the stomach, headache, dizziness, membranes pale, skin pale and sallow.

Examination shows pronounced systolic murmur in area of functional cardiac murmurs. *Brut de diable* present, but not pronounced. Murmur

can be heard in brachial and femoral arteries. Hæmoglobin 60 per cent. of normal.

Diagnosis, anæmia.

Given wine of cod-liver oil, thrice daily, continued for four months. Marked improvement in digestion and general appearance, says she feels well.

Hæmoglobin about same, vascular murmur unchanged. Medicine stopped.

Three months later returned in about original condition. Was then placed on carbonate of iron (freshly made), rapid improvement. Two months later hæmoglobin 80 per cent. of normal; vascular murmurs absent; cardiac murmur heard only while in recumbent position.

CASE IV.—Woman, aged thirty-six. Has suffered several years from hæmorrhages per rectum, losing much blood and resulting in severe exhaustion. Also troubled with catarrhal gastritis and duodenitis. Has had some operation on rectum without relief to hæmorrhages.

Examination showed rectum clear as far as fingers could reach. Rectal bougee reached very tender spot about nine inches from anus from which blood evidently came. This was treated by injections of four per cent. aristol solution in oil, with complete relief. During period of treatment the most careful medication and restricted diet, failed to relieve the stomach and bowel troubles, there was alternating diarrhœa and constipation, with much flatulence, and considerable pain and tenderness. She was given wine of cod-liver oil, and these troubles at once improved so that in two or three weeks she was able to resume an ordinary mixed diet without difficulty, gaining, as well, in appetite and strength.

CASE V.—Woman thirty years old. Previously healthy. In January, 1895, had severe exposure and was thoroughly drenched with water at a fire; was severely burned about back and sides. Had a severe attack of bronchitis immediately afterward. Acuteness of attack wore off in about three weeks under usual treatment. Burns healed slowly. Considerable cough and expectoration with mucous rales in both lungs, and a temperature of 99° was persistent in spite of various expectorant and tonic remedies. Five weeks from beginning of attack was given wine of cod-liver oil with guaiacol, and continued for ten weeks, at which time she had no temperature; cough and expectoration gone; appetite good and able to do housework.

CASE VI.—Woman 35. severe attack of gripe in February, 1895, with bronchitis in lower part of the left lung. Received usual treatment for acute phase of attack, was then given ammonium muriate and ext. of grindelia robusta, also iron and strychnia.

Three weeks later had still 1° of temperature, cough about same, expectoration profuse, not able to be about. Was given wine of cod-liver oil and guaiacol. Four weeks later up and about house, appetite fair, cough not troublesome, expectoration slight, no temperature, no rales to be heard in lower part of left lung.

Many cases similar to the above, could be cited, but would be mainly repetition.

The general improvement in digestion, assimilation, and nutrition of these patients, could not have been accidentally related to the period at which the remedy was exhibited. Whether a pure cod-liver oil that could be as readily taken and assimilated as the preparation under consideration, would not give better results, I am not prepared to say, having never seen such an oil. I am satisfied that I have had better results from the wine of cod-liver oil, than from any oil or preparation of oil that I have used so far.

That these alkaloids or ptomaines, or whatever they may be, which are contained in, or at least obtained from cod-liver oil, have certain physiological properties, seems to be pretty well established by the French investigators, and if their properties can be therapeutically applied with benefit to our patients, why should it not be done irrespective of their origin; at least until a pure oil as agreeable, efficient, and as readily obtained is at hand?

FOREIGN BODY BENEATH THE PALPEBRAL CONJUNCTIVA.

BY J. T. HAMILTON, M. D., KANSAS CITY, MO.

Formerly Assistant Eye and Ear Surgeon New York Throat and Nose Hospital:

The following case may be of some little interest to the medical profession, because of the very considerable length of time the foreign body was carried, and also because it demonstrates the ability of the orbital contents to withstand the ravages of the inflammatory process induced by the long and continued presence of foreign bodies.

Miss Emma U—, age 14, of Kansas City, Kas., presented herself March 6th, 1895, at my office for treatment, and gave the following history: May 1st, 1894, she, in company with several young people, went out to the country to spend the day, and as she was looking up at the branches of a tree, she felt something fall into her right eye. She immediately requested her young associates to search for the disturbing object, but they reported to her that there was nothing in the eye. She did not then apply to a physician, but after a few days of suffering, she said, her eye seemingly got all right. Since that time, at various intervals her eye would pain her and become much inflamed, but after the frequent and repeated local applications of hot water the inflammation would subside for a few weeks. When the girl came to me she had a very typical case of traumatic conjunctivitis. There was, in addition to the other symptoms, such an intense photophobia that she could not endure to have the lids separated until after the installation of a five per cent solution of cocaine, when I was enabled to evert the upper lid, and at once I discovered a foreign body, which had penetrated the palpebral conjunctiva and was completely encapsuled with a little granulated portion of that membrane. With a Graefe's cataract knife I made a small incision in the conjunctiva immediately over the foreign body, after which I succeeded in carefully removing it with a small curette. The foreign body proved to be a very hard substance one and one-half millimetres in breadth and length and one quarter of a millimeter in thickness. I ordered the patient to bathe the eye every half hour during the day with boracic acid solution (3ii, ad O, i.) and to report at my office the following day. She did not put in her appearance, however, the following day, as promised, but three days afterward she came to see me and all the symptoms had subsided. She again called on me the 6th day of this month (July) and said that her eye had not given her any further trouble.

200 JOURNAL BUILDING.

MISCARRIAGE OF TWINS AT THE FIFTH MONTH FOLLOWED BY A MIXED INFECTION, PUERPERAL FEVER —(SEPTICEMIA LYMPHATICA ET VENOSA) AND MALARIAL POISONING.

BY A. L. BLESSE, M. D., GUTHRIE, O. T.

CASE—Mrs. B., æt. 35. Spare habit, anemic, mother of four living children, has had several miscarriages, and abortions in one of which, preced-

ing the last, I attended her. This abortion was followed in seven months by the miscarriage in question.

After the recovery from the first I treated her for chronic malarial poisoning. After recovering from this attack she made a visit to an adjoining state. While there she was warned by premonitory pains of an impending miscarriage, and hastened home and again placed herself in my charge. She was suffering from a relapse of the malarial fever as well as an impending miscarriage. The malarial attack manifested a remitting tendency and the fever ranged from 100° to 102° F.

R Quininae - - - ss 3ss
Hydrastis pulv. - - - gr. ½
Ac. Arseniosi - - -

M. et. Divide in Capsules No. 12.

Sig. One capsule every two hours until four doses are taken, commencing eight hours before time of anticipated chill.

R Morphine sulph. - - - gr. ii
Fl ext. viburni prun. - - - gr. i
Ellyx. ammoniæ val. - q. s. ad. oz. ii

M. et. Sig. Teaspoonful every three hours until pains are relieved, then every four hours.

Absolute rest in dorsal decubitus was ordered.

For several days she progressed very comfortably, when without warning she had a severe chill lasting for a half hour, and I was again called. Found her temperature 103 degrees; labor pains again returned and with a vigor that precluded any doubt concerning the result. Apprehensive of septic complications the parts were cleansed with hot carbolyzed water and I was exceptionally scrupulous with regard to personal cleanliness. Examination revealed the os uteri dilated to the size of a silver dollar and a fetus presenting. No amniotic fluid was present and the child evidently had been dead for some time. Patient could not account for the absence of the liquor amnii and evidently it had been lost without her knowledge. Within an hour the fetus was expelled from the uterus and lay in the vagina from which I removed it. Pains subsiding I found it necessary to remove placenta and in the attempt to do this discovered the fact of twin pregnancy. After considerable difficulty I succeeded in removing the placenta.

All pains having subsided and auscultation revealing that the child in the uterus was alive and vigorous, after no little hesitation I concluded to cleanse well and leave it unmolested. Puerperium progressed normally for a week and I began to entertain hopes that she would carry the remaining child to full term. But it was not to be: labor pains returned and it was but a little while until the fetus and secundines were expelled in toto, the uterus retracting well.

Immediately upon expulsion of products of conception patient went into an extremely severe chill. Reaction occurred in half an hour—whiskey and digitalis being freely administered.

Realizing the probable septic nature of this chill the cavum uteri was now thoroughly cleansed, using the aseptic finger as a curette and following with a carbolyzed intrauterine injection. For an intrauterine tube a Skene's

capillary uterine applicator was used—the return flow being assured by pressing the against the anterior cervical lip.

Completed the toilet by cleansing the vagina and inserting in the cavum uteri a bacillus:

R	Iodoformi	-	-	-	-	scruples ii
	Gummi arabici	-	-	-	-	
	Glycerini	-	-	-	-	
	Amyli	-	-	-	ss	gr. 10

M. et. Ft. in Bacillus No. 1.

This formula is derived from Prof. Lusk's work on Obstetrics, and for continuous disinfection in my hands it has proven very effective. It is far preferable to frequently repeated douches and at the same time more permanent in its action, with less risks than attends too frequent intrauterine meddling. Temperature one and one-half hours after delivery was 103°. Acetanilid was given in four grain doses guarded by whiskey and digitalis, every three hours until temperature should fall or free perspiration follow. Pulse 100, thin in quality—(a rapid puerperal pulse is to me, always an ominous symptom.) The following morning at 8 o'clock she chilled again, followed by fever and sweat. Lochia, to all appearances were normal in quantity and were odorless, the uterus and adnexa no more than ordinarily sensitive to pressure and the abdomen was soft. Temperature reached 103½° by 5 o'clock p. m. and then subsided. Prescribed quinine and iron; the vagina was again thoroughly cleansed and the uterus, upon inspection showing no putrefactive or inflammatory changes, was left alone. Temperature next morning was normal but gradually rose through the day to 102½°, but without the preceeding chill. During the following week the temperature ranged between 100 in the morning to 103 in the evening, accompanied by a slight tendency to chill, described by patient as a "crawling sensation." This chilly sensation supervening later each day. Insomnia of an intractable nature, had been during this time a constant source of annoyance. Morphine or any opium exaggerated it. Sulphonal had no effect, chloral was contraindicated on account of weak heart action. Uterus was undergoing involution apparently in a normal manner, its depth at this time being about three or three and a half inches. Lochia scanty and of a light color with no perceptible putrefactive odor.

It will now be noted that, at no time was there present the least putrescent odor, no abdominal or pelvic tenderness, no tympani, no exudation that I could locate with the most careful bimanual examination. At this time the severest chill of all supervened at midnight, continuing for an hour and the fever at once mounted to 105°. Ordinarily and abscess formation would have been assumed, but in this case if such were present it proved impossible to locate it after the most searching examination. The cavum uteri was again washed out on suspicion but the water returned perfectly clear. The uterus itself was firm and freely and painlessly movable. At this time acting upon my suggestion, Dr. H. L. Smith of this city was called in council. The treatment as given was approved, with the addition of:

R	Atropiæ sulph.	-	-	-	-	grs. ss.
	Ac. sulphurici aromat.	-	-	-	-	drams ii.
	Aquæ	-	-	-	q. s. ad.	oz. iv.

M. et Sig.—Teaspoonful as required to control exhausting sweats.

Chills and fever followed, daily for another week, medication seeming in no wise to ameliorate any of the symptoms, except perhaps, the sweating. Tongue was clean, but bright red—in some places abraded. Temperature running as high as 105° daily, pulse 100 to 120, weak and thin, mind clear but restless. No appetite but stomach retaining nourishment and medicine exceptionally well. Nourishment consisted of Liebig's beef, soft boiled eggs, milk punch, and liberal quantities of alcoholics. Raw white of egg well beaten proved to be the most helpful food. An icterous hue over-spread the skin, indicating a rapid blood decomposition, auguring ill enough of the future, patiently rapidly growing weaker and disheartend.

It was plain to be seen that some kind of impression must be made at once for the case was rapidly growing hopeless.

So as a last resort all medicines that she was then taking were discontinued and the next morning 40 grains of quinine was exhibited at one dose, to be followed by eight drops of aromatic sulphuric acid in a wine glass of water. No other medicine to be given except one drop of fl. ex. digitalis in two tablespoonfuls of brandy every three hours. When I called in the evening I was gratified to find my patient peacefully sleeping and temperature down to 99½ and with corresponding improvement in every direction. At 4 p. m. next morning a slight tendency to chill manifested itself, but passed away. The quinine was given in the same manner for three successive mornings and I had the supreme satisfaction of seeing my patient verging toward convalescence.

A pneumonia of the lower lobe of the right lung now supervened to darken my patient's horizon again. So sudden was the consolidation and so little the constitutional disturbance incident thereto that the metastatic nature of it was apparent.

R	Fl. ex. digitalis	-	-	gtt. xii.
	Amm. chlor.	-	-	gr. xlviii.
	Syr. yerbæ santæ	-	q. s. ad.	oz. ii.
	M. et. Sig. Teaspoonful every three hours.			
R	Iodoformi	-	-	gr. ii.
	Ft. in caps., No. 12 Sig.			

One every four hours. The exudate cleared away rapidly under this treatment.

She had been complaining of pain in the joints, particularly the shoulder joints for several days, but fortunately this did not assume an inflammatory aspect. She described it as "rheumatic twinges" which, notwithstanding the similarity, it probably was not. The joint complications subsided readily under the hot water bags.

After she had been convalescing for three weeks and became able to move some little about the house she suffered an attack of plegmasia alba dolens, from the effects of which at this writing she is just recovering. At no time during the course of her sickness has there been anything about the uterus indicating that organ to be the *fons et origo* of the infection.

REMARKS.

Considering this case as a whole one might hesitate in the diagnosis between simple malarial fever, puerperal fever or a combination of both.

1. The history of a previous and coexisting malarial intoxication is clear.

2. Chills, fever and sweat is the cycle of a true malarial infection, but it is present in other infections as well, particularly those of a septic nature and which go on to abscess formation. In this instance the impossibility to demonstrate true abscess formation made the diagnosis to that extent uncertain. That there was some local nidus I believe since there was a secondary metastatic formation in the lungs, slightly so in the joints and the plegmasia dolens. The case in no one particular followed the usual course of puerperal infection because—

1. It was not possible upon deep palpation to elicit tenderness either in the uterus or adjacent structures.

2. The uterus seemed to undergo normal involution.

3. No peri- or para-metric exudation demonstrable.

4. There was present neither endometritis or endo-cervicitis.

5. The usual severe pains of puerperal pelvic inflammation was absent.

That she was suffering from malarial infection was not to be doubted from the history of the case. But this is inadequate to explain all the phenomena present. That it was mixed with puerperal infection probably of the lymphatic and venous types is evident to me. If this view of the case be the true one it is of exceptional interest in that it demonstrates the possibility of a profound systemic toxemia with so little local manifestation as to almost or quite defy detection. Finally what role did the leaving of the living child in the uterus for one week after the expulsion of the first and dead one, play in the etiology of the disease?

The prompt effects of the large single daily dose of quinine must not be passed without calling particular attention thereto.*

708 W. NOBLE AVE.

ECZEMA OF THE GLANS PENIS.

BY WM. FRICK, M. D., KANSAS CITY, MO.

Lecturer on Dermatology Kansas City Medical College.

I wish to report two cases of eczema of the glans penis, which seem to me to be unusual cases. Eczema is a disease capable of affecting any part of the skin, but I have never seen a case reported affecting the glans penis. These two cases came under my observation within a few months of each other. They were clearly cases of eczema and nothing else. In fact the first one was as typical a case of the disease as I ever saw on any part of the body.

CASE I.—C. W. S., a single man, about 23 years of age, first consulted me in March, 1894, on account of an old urthritis, which had been with him for fifteen months. Examination showed a profuse purulent discharge, a great amount of induration through the glans, particularly through the

*Since writing the above I have opened a large abscess which gathered at the point of insertion of the deltoid muscle of the left arm. This abscess was of the so-called "cold" type. It discharged a large amount of creamy pus, and at this writing is about well. The limb affected by the phlegmasia still swells considerably upon exercise. In all other regards the patient is recovering her strength and health rapidly.

meatus, and a stricture near the meatus. He complained of much pain through the glans, especially severe during micturition. We relieved the stricture by simply dividing it with a blunt pointed bistoury, and passage of sounds afterwards. The pain was relieved almost immediately. The case progressed well until the discharge was reduced to a morning drop and the induration to a very little at the meatus, there progress seemed to stop. In August, five months after dividing the stricture, there appeared on the small amount of induration a watery eruption. This eruption became very itchy and spread in a few days over the entire glans. Upon close observation we could see developing the minute papules, which became minute vesicles, and bursting poured forth a profuse watery fluid characteristic of this form of eczema on any part of the body. This healed up very readily under the ordinary treatment of an acute eczema, and was completely well in a few weeks. More than that, when the eruption was cured there was no further trouble with the urithritis or induration about the meatus.

CASE II.—C. D., a single man, about twenty-six years old, was subject to herpes preputialis. He believed that the cause of this herpes was syphilis which he thought he had several years prior. He could give no clear history of secondary manifestations, and it seemed to me doubtful if he had ever had syphilis. He did, however, have one or more sores about the genitals at the time spoken of and was given constitutional treatment by an advertising doctor. In the latter part of January, 1895, he had his usual herpatic eruption. He was particularly concerned about it as he was to be married in a short time. He immediately applied some strongly carbolized vaseline to the eruption. January 30th, he consulted me with the expectation of hearing that he was breaking out with syphilis, I found instead a well marked case of eczema of the glans penis, covering the glans and extending back onto the prepuce but no further. There was a profuse watery discharge and a marked amount of itching. Applications of zinc ointment proved quite satisfactory in the case and it was well in a short time without any other treatment.

320 RIALTO BUILDING.

THE TEACHING OF ANATOMY.

BY HERMAN E. PEARSE, M. D., KANSAS CITY, MO.

Professor of Anatomy Kansas City Medical College.

The set lecture in the teaching of anatomy must go. It is as useless as it is obsolete. We must teach, not lecture. The chalk and black board, the living model, the lecturer's arm or leg, the cadaver, must all be the teacher's assistants. Facts stated in order, one after another, anatomical facts especially, cannot be retained by the pupil. A desire to help the doctor who wishes to study anatomy without a teacher, and the doctor who teaches anatomy has induced me to write this brief paper.

At the Kansas City Medical College we have learned by experience that osteology cannot be easily taught by lectures. It belongs to the demonstrator. The plan we pursue at present is this: The teaching staff consists of the professor of anatomy and the prosector to the chair, the lecturer on anatomy who likewise receives the assistance of the prosector, a chief demonstrator and four assistant demonstrators.

The work of the professor and lecturer is to teach (from the cadaver and the model and by the aid of charts and what is better, the black board and chalk,) regional anatomy, the surgical anatomy of various parts, the anatomy

Sept. Oct. Nov. Dec. Jan. Feb. Mch. April. May.

KEEP THIS CARD.

Name..... Date.....

HEAD AND NECK.

1	1	The Student must expose and exhibit to the Demonstrator				
2	2	or his assistants, the following structures:				
3	3	Scalp; Vessels and nerves of scalp and supra-orbital region;	1	2	3	4
4	4	M. Occipito-frontalis; M. Orbicularis palpebrarum; Temporal	5	6	7	
5	5	fascia;* Cranial bones; Membranes covering the brain; Exit of	8	9	10	11
6	6	nerves;† Muscles of expression; of the eye; Buccinator; Trans-	12	13	14	15
7	7	verse facial a.; Parotid gland; Socia parotidis; Steno's duct; Pes	16	17	18	19
8	8	anserinus; Facial nerve; Infra-orbital nerve; Temporal and	20	21	22	
9	9	Masseter m.; Facial artery; Posterior auricular artery; Ptery-	23	24	25	26
10	10	goid muscles; Internal maxillary artery; Inferior maxillary	27	28		
11	11	nerve; M. Platysma myoides; Ext. Jugular vein; Superficial	29	30	31	
12	12	cervical nerves; Deep cervical fascia; M. sterno-mastoideus;	32	33		
13	13	Spinal accessory nerve; Boundaries and contents of the surgical	34	35	36	
14	14	triangles of the neck; Sterno-hyoid, Sterno-thyroid, Omo-hyoid	37	38	39	
15	15	and Thyro-hyoid m.; Common carotid artery; bifurcation; Ext.	40	41	42	43
16	16	carotid artery; Branches of External carotid artery; Int. jug-	44	45		
17	17	ular vein; Descendens and Communicans noni nerves; Thy-	46	47	48	
18	18	roid gland; Submaxillary gland; Hypoglossal nerve; Lingual	49	50	51	
19	19	artery; Digastric, Stylo-hyoid, Mylo-hyoid and Hyo-glossus,	52	53	54	55
20	20	m.; Cervical plexus; Phrenic, Pneumogastric and Sympathetic	56	57	58	59
21	21	nerves; Subclavin artery and vein; branches; Recurrent la-	60	61	62	63
22	22	ryngeal nerve; Origin of Brachial plexus; Vertebral artery;	64	65		
23	23	Scaleni muscles; Muscles of tongue and pharynx; Epiglottis	66	67	68	69
24	24	Thyroid cartilage and cricoid cartilage; Trachea; Esophagus;	70	71	72	73
25	25	Trapezius, Splenius capitis et colli, Levator anguli scapulæ,	74	75	76	
26	26	Complexus, Obliqui, Recti capitis and Trachelo-mastoid, m.	77	78	79	80
27	27	15 Sinuses of dura mater; Circle of Willis; Ant. Cerebral a.;	81	82	83	
28	28	Middle Cerebral a.; Posterior Cerebral a.; Medulla oblongata	84	85	86	
29	29	and Cord; Anterior and Posterior fissure; Basilar Artery;	87	88		
30	30	Pons Varollii; 5 lobes of Cerebrum.; Sylvian fissure; f. Rolando;	89	90	91	92
31	31	Parieto-Occipital f.; Longitudinal f.; Motor tracts; arrange-	93	94	95	96
		ment of gray matter; Of white matter; Cerebellum; Ganglia	97	98	99	
		2 at base of brain; Ventriculs.		100		
	3	All anomalies must be noted on back of this card.				
4	5	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24				

*The brain should now be removed and placed in fluid to harden.

†The student may here demonstrate &l to advantage.

Sept. Oct. Nov. Dec. Jan. Feb. Mch. April. May.

KEEP THIS CARD.

Name..... Date.....

THORAX AND UPPER EXTREMITY.

**The Student must expose and exhibit to the Demonstrator
or his assistants, the following structures:**

1	1	Fascia; Cutaneous and intercostal vessels and nerves; (Mam-	1	2	3	4
2	2	mary gland); Cephalic Vein; Pectoralis major muscle. Ext.	5	6	7	
3	3	ant. thoracic nerve; Axillary fascia; Boundaries of axilla;	8		9	
4	4	Inter-costo-humeral nerves; Axillary glands; Pectoralis	10	11	12	
5	5	minor m.; Int. ant. thoracic nerve; Axillary vessels;	13		14	
6	6	Branches of Axillary artery. Dorsalis scapulæ a.; Posterior	15	16	17	
7	7	thoracic nerve; Brachial plexus; cords; divisions; M. Sub-	18	19	20	21
8	8	clavius; Costo-coracoid membrane; Coraco-clavicular liga-	22		23	
9	9	ments; Latissimus dorsi, Teres major, Subscapularis, Ser-	24	25	26	27
10	10	ratus magnus m.; Cutaneous nerves of arm; Superficial veins	28		29	
11	11	in front of elbow; Basilic vein; Brachial artery; Distribution	30	31	32	
12	12	of Brachial plexus; Biceps, Coraco-brachialis, Brachialis	33	34	35	
13	13	anticus and Deltoid m.; Branches of Brachial artery; Bifur-	36	37	38	
14	14	cation; Median nerve; Muscles of front of the forearm; Palmar	39	40	41	
15	15	fascia; Muscles of palm; Insertion of flexor tendons.	42		43	
16	16	Ulnar artery and branches; Distribution of Ulnar and	44	45	46	
17	17	Median nerves; Anterior interosseous artery. Superficial	47	48	49	
18	18	and deep palmar arches; M. Triangularis sterni; Internal	50	51	52	
19	19	mammary artery; Phrenic nerve; Pericardium; Arch of	53	54	55	
20	20	aorta; Innominate artery and veins; Pulmonary artery and	56	57	58	
21	21	veins; Heart; Coronary arteries and sinus; Cavities and	59	60	61	62
22	22	valves of Heart. Lung; root, border, apex, base; Mediastina;	63	64	65	
23	23	Œsophagus; Venæ cavæ; Thoracic duct, Pnuemogastric	66	67	68	69
24	24	and sympathetic nerves. Intercostal muscles; Trapezius;	70	71	72	
25	25	Muscles of Scapula; Muscles of 4th layer of back; M. Triceps;	73	74	75	
26	26	Musculo-spiral nerve; Muscles of back of forearm; Muscles of	76	77	78	
27	27	back of hand; Radial artery and nerve; its divisions	79	80	81	
28	28	and distribution; Ligaments of the shoulder and elbow-joints.	82		83	
29	29	Spinal Membranes, nerves and roots; Ant. and Post. fissures;	84	85	86	
30	30	lateral columns; Arrangement of white fibres; Of gray matter;	87		88	
31	31	Chordæ equinæ; decussation of fibres.	89	90		

All anomalies must be noted on back of this card.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

Sep. Oct. Nov. Dec. Jan. Feb. Mch. April. May.

KEEP THIS CARD.

Name..... Date.....

ABDOMEN AND LOWER EXTREMITY.

**The Student must expose and exhibit to the Demonstrator
or his assistants, the following structures:**

1	1	Fascia of the Abdomen (two layers); Superficial abdominal	1	2	3
2	2	vessels and nerves; M. Obliquus ext.; Inguinal rings; Parts	4	5	6 7
3	3	concerned in Inguinal hernia; M. Obliquus int.; Scrotum;	8		9
4	4	Testes; Penis or Labia; Vestibule; Clitoris; Sheath of Rectus	10	11	12 13
5	5	muscle; Lineæ transversales, semilunares and linea alba; M.	14	15	16 17
6	6	Rectus abdominis; Deep epigastric artery; Hesselbach's tri-	18		19
7	7	angle; Remains of Urachus and Hypogastric arteries. Perito-	20	21	22
8	8	neum; reflections greater and lesser cavities; omenta; Foramen	23	24	25 26
9	9	of Winslow; Abdominal and pelvic viscera; Abdominal aorta	27	28	29
10	10	and branches; Cœliac axis and branches; Mesenteric arteries	30	31	32
11	11	and distribution; Receptaculum chyli; Iliac arteries and	33		34
12	12	branches <i>within</i> the pelvis; M. Psoas; M. Iliacus; Origin of	35	36	37
13	13	Lumbar and Sacral plexuses; Superficial fascia of thigh, and	38	39	40
14	14	cutaneous vessels and nerves; Cribriform fascia; Saphena	41	42	43 44
15	15	vein; Fascia lata; falciform process; Saphenous opening;	45	46	47
16	16	Femoral sheath; Coverings of femoral hernia; Scarpa's	48	49	50
17	17	triangle; Gimbernat's ligament; Distribution of Lumbar	51		52
18	18	plexus; Femoral artery and branches; Profunda artery and	53	54	55
19	19	branches; Tensor vaginæ femoris and Sartorius m.; Quadriceps	56	57	58 59
20	20	extensor and adductor muscles; Pectineus and Gracilis m.; Ob-	60	61	62 63
21	21	turator nerve and branches; Hunter's canal; Muscles of front	64	65	66
22	22	of leg; Anterior tibial artery and nerve, and branches;	67	68	69
23	23	Muscles of dorsum of foot; Peroneal muscles; Musculo-	70	71	72
24	24	cutaneous nerve; Glutei muscles; External rotator muscles;	73		74
25	25	Sciatic Foramina; Sciatic Nerve; Terminal branches of Int.	75		76
26	26	Iliac artery; Branches of Sacral plexus; Popliteal space;	77	78	79
27	27	boundaries and contents; Hamstring muscles; Muscles of	80	81	82
28	28	back of leg; Posterior tibial artery and nerve; Peroneal	83	84	85 86
29	29	artery; Muscles of plantar surface of foot; Plantar arteries and	87	88	89
30	30	nerves; Plantar arch; Ligaments of hip, knee and ankle joints.	90	91	92
31	31	All anomalies must be noted on back of this card.			
1	2	3	4	5	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

of the nervous, venous, arterial and lymphatic systems and the contents of the cavities. "Quizzing" is usually done every day, and once a week the prosector gives a general "quizzing up" of the week's work. The students are arranged in classes at the opening of the session by the chief demonstrator, and under an assistant each section thus formed is taught osteology, and must pass examination, not before the assistant demonstrator who has taught them but before the chief, *before being allowed to dissect*. When ready for dissection the student is given a card containing the points to be dissected. This card is almost identical with the one used at Long Island College Hospital, New York, and described in the *Brooklyn Medical Journal* for June 1894, by Dr. Wm. W. Browning. I had previously used an end-folding-list, quite cumbersome but very satisfactory; however since using Dr. Browning's card, I have with slight additions adopted it and reproduce here as a help to other teachers of anatomy and to practitioners desiring to dissect in private or review anatomy by text-book. Each demonstrator is expected to teach the anatomy of each topic first, then to see that the student properly understands it after having dissected it and demonstrated it. He then punches out the number corresponding to this topic, on the right hand margin of the card. The card is dated when the student is assigned.* The month is punched out when work is commenced, and a figure on the left hand margin punched out by his demonstrator, corresponding to the day of the month upon which he presents himself for work. The card thus registers the student's attendance and as each demonstrator has a punch of different figure, it also registers the attendance of the demonstrator. First the figures of the outer column are used, then those of the middle and lastly, if the student work so long, those at the bottom. The figures at the right hand side number the topics and one is punched out whenever the topic has been dissected out and recited to the demonstrator. Thus the chief demonstrator or a substitute or the professor visiting the room, can tell at a glance how far the student has recited and what topics are suitable for review. Upon the back is written a record of anomalies found and other notes. This card is much better than the old form of demonstrator's ticket as it gives a report in detail of the work done by the student and a complaint by a student that he is being neglected can be verified or disproved by a glance at the punch marks on his card.

The system has given such satisfaction that it is here reproduced, with proper acknowledgement to Dr. Browning, in the hope that it may assist some others, as it has my classes, in the study of that most interesting science, human anatomy.

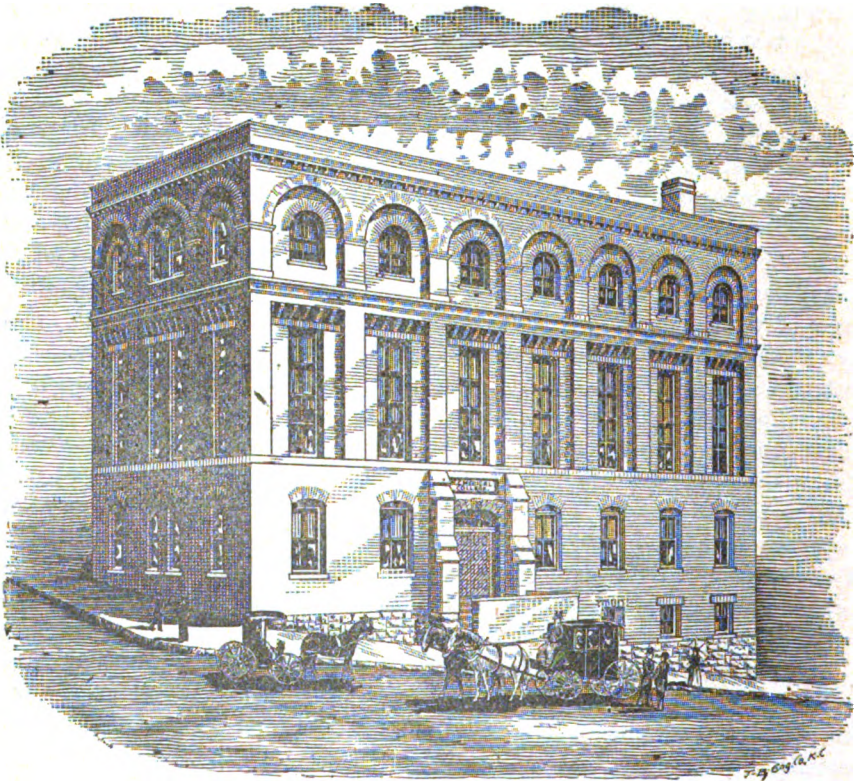
The state board of charities announces the appointment of Dr. T. C. Biddle, of Emporia, as superintendent of the Osawatomie insane asylum to succeed Dr. L. F. Wentworth, whose term expires August 1st. Dr. Biddle's appointment was asked for by the United Republicanism of Lyon County, and he is said to be eminently qualified for the place. The board permitted Dr. Eastman, superintendent of the Topeka insane asylum, to choose his own assistant, and he has selected Dr. J. E. McCraig, of Danville, Pa., who has been connected with the Pennsylvania asylum.—*Journal*.

*Dr. Wm. Keller, Professor of Anatomy in the University of Texas, has given in the *New York Medical Journal* for June, 1894, an excellent treatise on the care of anatomical material as well as on the teaching of anatomy.

EDITORIAL.

THE KANSAS CITY MEDICAL COLLEGE.

We present to our readers a picture of the new building of the old Kansas City Medical College—the mother school of the West for twenty-seven long years. The demands of its classes have been imperative and it has enlarged its buildings to accommodate its increased classes. For some time the question of change of location has been considered, but wisdom has dictated the present site, as its convenience to the clinical fields of the city and to the depots and car lines and to the various hospitals, make it desirable. Some \$20,000 will be expended in new buildings and equipment, and all is contracted for, to be completed October 1st, 1895.



KANSAS CITY MEDICAL COLLEGE.

The school with its long history of useful work and its many alumni, its teachers and its directors,—all are to be congratulated upon its solid, sure prosperity. It has grown in an honest, sturdy way, free from loud advertising and catch-penny devices for attracting students and its name has not been sullied by scandal or report of improper, unprofessional deeds. May it continue on its career and adhere to the present high plane, its faculty have established for it.

The new building affords a large amphitheatre, a library, students waiting room, demonstrator's room for the use of the demonstrator of anatomy, a histological and chemical laboratory and a steam heating plant. The old dissecting room is enlarged and improved. The furnaces have been taken out and all rooms heated by steam. All plumbing and furnishing is replaced by new, thus making a large, modern commodious college building in every way suited to the advanced demands of the times.

THE INFANT AND THE MOTHER.

The hot months are upon us and bear with especial severity upon two members of every household; upon the infant first on account of the inability of the poor little sufferer to impart his woes and ask for relief and, in the humbler class of homes, upon the mother, on account of the utter uselessness of imparting hers or of seeking relief. Babies in hot weather suffer from too warm clothing, too much milk and too little water and air. They cry, and the diagnosis of colic is made, a flannel band or dress is added to the already too burdensome clothing and to still the cries, baby is given the breast or bottle. From the retained body heat come disturbed digestion, diarrhea, bronchitis, etc.

The mother too often is also wash woman, cook, chambermaid and assistant gardener, with the family sewing to do at odd time. Over work, over heating, nervous strain, and poor milk supply are the logical results, and she will be an easy prey to malaria, dysentery, etc.

The doctor may do much for these sufferers. See to it that the infant is dressed in clean, cool garments; a *light* abdominal band—a knit shirt and a loose soft slip and diaper is enough—when the thermometer ranges around 80°. Do *not* allow a thick, unclean diaper to be worn or one that is damp. See that it nurses from a full breast, and does not tug at an empty one. If the mother's supply is deficient give it a substitute of one part cream, six parts milk and ten parts water, and see that all are pure and sterilized. Explain to the mother that baby gets a thick, unhealthy material that is not good for him, when he nurses from an empty breast, and tell her to give him a drink of good cool water occasionally. Tell her that he is better off out of doors under a tree or on a porch than in a hot room. For the mother's sake interview the husband, if he needs it, and tell him confidentially that he can save a doctor's bill if he will send out the washing for awhile and have less cooking done. That he might get the wife away to her sister's or her mother's for a week or two. Ease up the strain that is pulling on her mother nerves so unceasingly, at least for a little while during the hot weather. It should be a watchword among us these hot days; ward off danger threatening the infant and the mother.

BOTTLE FED BABIES AND HOT WEATHER.

Nine-tenths of the deaths in summer from bowel diseases occurs among bottle fed infants! What a sermon! What is the cause? The microscope has answered it, and the answer coming from the laboratory is confirmed in the clinic; micro-organisms of fermentation and decay, growing in and

poisoning the milk that forms the infant's food supply, and which may have been otherwise pure and wholesome. The sterilizer has done much to obviate this trouble and is doing more. In New York, Boston, Philadelphia and other cities milk laboratories are now in successful operation and this month has seen one established in Kansas City. Judge H. D. Barto, a former druggist of Kansas City, has become interested in the work and has expended some considerable money in the matter. It is a pleasure to see the safe guards thrown about our patients by skilled hands at the fountain of supply. The cows are milked in cool airy quarters, free from flies and dust. They are fed on pure bran and corn; watered from pure spring water, and pastured in shady blue grass pastures. The milk man is clean. He looks as though he could handle a baby itself, or any of its surroundings and not contaminate, and his cow and stall and milk pail is as clean as he is. He milks in a covered pail with a spout, like the ordinary water sprinkler only in place of the perforated sprinkler he has a large funnel and the milk goes through a wire strainer and through a layer of absorbent cotton before reaching the bucket, and not a hair or a particle of dust reaches the bucket. As soon as milked, the milk goes into a separator. Cream and milk are at once separated and placed on ice, and when re-combined are proportioned according to the doctor's order. The patient may have four per cent. of butter fat as cream, or six per cent., or one per cent., to suit his digestion. If the curds bother the little fellow's bowels, he may have full percentage of cream and milk sugar and a reduced caseine and so on to the satisfaction of the doctor. The prescribed quality of milk being ascertained it is placed in round nursing bottles, clean and sweet, sterilized, and placed in little nests of six or eight bottles, with just a good meal in each bottle, labeled with the name and address of the customer and delivered, and the wagon that delivers the milk carries it in an ice chest all the while. In short the milk is wholesome, properly modified to suit the child, pure, and kept clean and uninfected. The driver calls for the empty bottles, cleans them, sterilizes and fills them again and returns them next morning.

The clean quarters, the intelligent care of milk, (being in the hands of Mr. Wilson, of Independence, Mo., a graduate in pharmacy of the College of Pharmacy in New York,) the well screened windows and doors and the thorough sterilization of all utensils and instruments say as plainly as words painted "no germs need apply" and baby and doctors testify to the good results of such feeding.

It is a hard lesson for mothers to learn to keep nipples, bottles and milk clean in hot weather. It is a mournful commentary on the lack of such care that so many bottle fed children sicken each year. But the physician must be the educator, who will teach the mother how, by eternal vigilance, she may keep her child's food pure, and it is well for him to *know* the past history of that milk, that the patient efforts of a careful mother are not thwarted by the laziness or dirtiness of the man or boy who milked the cow and poisoned the milk before it ever reached strainer, sterilizer or ice box. A sterilizer does not affect chemical poisons already formed. It will only kill the germ that

formed the poison. It will not destroy filth or foreign matter dissolved in the milk at milking time.

Feed regularly and know that the dairyman has done his part in the care of the cow and the milk before it reaches your patient's hands, and the hot months will lose some of their terrors. Even at best they are times of apprehension for parents and doctors.

THE PHYSICIAN HIMSELF.

The summer month are busy times for the doctor and he is especially apt to over-look himself and his own finances in the weight of care that comes with the period of fevers among the adults and bowel diseases among children. The doctor's rest is often disturbed during this season and his days are crowded to the utmost with cases everyone of which is a responsibility in itself. The close financial market has made money scarce and to this must be added failure of crops in many localities for the past few years. Many doctor bills have gone unpaid and many doctors are in debt. Now that better things promise it behooves the doctor to see that his ledger is in good order; that accounts long over-due are arranged this summer, presented and collected during the money movement that always comes with the late summer and fall. There is no charity like that which collects a moderate fee from clients who should pay it, and applies the proceeds to the improvement of the doctor's home and family, and we all owe our wives more than they will ever receive. Watch the collection department for the next four months. Charity begins at home. The laborer is worthy his hire, but he must demand it and that urgently. Let us have no excuse for demanding money other than the fact that we have rendered the service and are entitled to the rewards. There is no one more loved, respected and sought for than the doctor, who charges a moderate fee and insists upon its payment. Times will not be good this fall. *They never are for the doctor unless he makes them so.* But there will be money in circulation. Let us demand our portion. Post the books, collect the bills; pay the debt now standing and strive for a balance on hand for January, 1896. This is one remedy for hard times.

SOME "DON'TS" FROM THE EDITOR.

Don't expect the journal to chronicle your doings when the editor don't know of them. When anything occurs in which your name should figure, drop a line to the editor and tell him so.

Don't expect your particular communication to appear as soon as received. Space is limited and much must await its turn.

Don't ask the editor to publish your articles before he has read or heard them. He is peculiar that way. He won't do it.

Don't wait for a sight-draft or a collector, but pay your subscription as early in the year as possible, and

Don't send a personal check on your local bank. It requires from fifteen to twenty-five cents expense and several days time to cash it—and that *tells* on a two dollar check.

Don't get mad if the publisher draws a sigh draft for your subscription in the latter part of the year. The paper house, the printer, the engraver and all others do the same with us. Pay it, or if you cannot pay write a gentlemanly letter to the publisher and say so.

Don't "stop the paper" every time a collector calls for the money. It is a bad form. Collectors can't stop papers. Write a card to the publisher when you want it stopped.

Don't forget that the editor and publisher of the average medical journal is a doctor who does all the work of the office in the hours outside of his practice and he *may* forget something. There are limits to the human memory.

Don't let this list of "don'ts" make you think that the editor has liver complaint or is in bad humor. Read every one of them. We can do business more smoothly on a common understanding.

Don't fail, if you have a kick coming to *you* about the paper or any thing in it, to write to the editor and say so. He will remedy it.

Don't try to read *everything* but look the journal over carefully and mark what is of interest to you and read it at your leisure, and

Don't say "there's nothing in the journal." That's a mistake. There is *always* a good many hard hour's work in it. The fault is yours if you can't grasp it. There is always something new to you.

EDITORIAL NOTES.

ASPHYXIA.—Dr. Louis Burckhardt, of Indianapolis, writes for the Fort Wayne *Medical Magazine* about asphyxia of the new-born. He divides his cases into pale asphyxia and livid asphyxia; the former of grave prognosis and the latter quite favorable. After detailing the various methods of resuscitation he settles upon that of Schultze's as the best. He says. "He who begins his attempt at resuscitation by a movement producing inspiration, without having first removed the slime that clogs the air passages, or who performs Schultze's swingings on a child whose heart is extremely feeble may expect no success." If from the course of labor asphyxiation is feared let a space near the stove be prepared with warm clothes, an elastic catheter, a warm bath of 100° F., a bucket of cold water, and a syringe.

As to the application of Schultze's method he says: "Under all circumstances any method that aims to establish artificial respiration must start with an expiratory movement, for by primary inspiration foreign bodies are aspirated into the deeper parts of the air-passages. Of all approved methods the method of Schultz is preferable. This method clears the air-passages, introduces air into the lungs, and enlivens the energy of the circulation. The child should be grasped in such a manner that the operator's thumbs rest, on either side, upon the anterior thoracic wall, while the index finger occupies the axilla, and the remaining fingers are placed diagonally across the back.

Hereby the head is supported by the ulnar-borders of the wrist. Now the physician takes his position with slightly straddled legs, and the child is allowed to hang at arm's length between the knees of the obstetrician. The child is next swung upward, until the arms of the operator reach an almost horizontal position, and the lower part of the body is allowed to fall slowly over the upper part of the body. During this movement we must be very careful that the fingers do not exercise an undue compression of the thorax from any side. By this upward swinging a considerable compression

sion of the organs of the chest is produced, both at the diaphragm and at the thoracic-wall, which effects a passive expiratory movement. As a result of it the aspirated liquids are expelled in abundant quantities from mouth and nose. After a short interval the child's body is swung downward, the thorax is relieved of all pressure, which dilates on account of its elasticity, the ribs expand and the diaphragm descends. This effects a purely passive but very efficient inspiration, and the air passes through the glottis into the air passages with an audible sound. After a few seconds' pause the child is swung anew up and downwards, and this proceeding is repeated six to eight times. The manipulations having been repeated six or eight times we put the child in a warm bath in order to preserve the temperature of the body. Now we observe the effect of the artificial respirations. If the heart action quickens, and if the pale skin gets reddish, surface irritations are sufficient to complete the resuscitation. Change of temperature is the most powerful agent at this stage. A syringe full of cold water directed on the chest, as long as the child is in the warm bath, excites wonderful deep inspirations.

As long as no spontaneous respiratory movements occur, perceptible by slight undulations in the epigastric region, Schultze's swinging must be repeated. We continue the resuscitation till the child shows full vitality. It must cry most vigorously, the skin must turn red, the eyes must be opened spontaneously, and the extremities must be moved energetically. After hard work of one hour, or one hour and a-half we often succeed in resuscitating the child. But if we have to deal with extremely deep asphyxia, or where it is complicated with compression of the brain, all efforts may fail. We should never stop our endeavor before the cessation of the heart's action indicates that death has occurred."

REGULATING SURGEONS' CHARGES.—A bill has been introduced in the Illinois legislature providing that the charge made for a surgical operation, whether it be simple or complicated, shall not exceed a hundred dollars. Concerning this proposition the *Chicago Tribune* with fine sarcasm says: "He has read no doubt of the enormous sums charged by some surgeons for exploring the recesses of a man's skull or his stomach—sometimes killing and sometimes curing him. He knows that only rich men can afford to pay these high prices and that poor men are at a great disadvantage, unless they are fortunate enough to be cared for at a hospital."

This is a benevolent idea on the part of the senator. It is understood that he is going to follow it up with a bill regulating the charges of dentists. At present it costs a great deal of money to get the services of the best operators. The senator thinks their skill should be at the service of the entire community and not merely for those who are able to pay fancy prices.

We must not stop there, however. There are other professions which should be taken in hand. A law should be passed to regulate the charges of lawyers. It should provide that no man can collect more than a hundred dollars for saving a client from the gallows or a life term at Joliet. At present the charge is often a thousand dollars or more. As the senator must see there is no excuse for this. The mere fact that a criminal has money is no reason why a lawyer should charge him an excessive sum for getting him clear. Lawyers may be said to be more subject to the legislature than doctors are, for the former are supposed to be court officers. Once lawyers' fees were regulated by some legislatures.

Then it is a matter of notoriety that the rent of the most desirable houses and stores is greater than that of the less desirable ones. Unless a man has considerable money it is impossible for him to become the tenant of a fine dwelling in a fashionable part of the city. He is compelled to go where the accommodations are not as good and the surroundings not as agreeable. This is often unpleasant for husbands and always so for wives. Why cannot the senator introduce and put through a bill regulating house rents and providing that no person shall be asked more than three or four

hundred dollars a year? If a surgeon charge extra on account of his special skill why should a landlord be allowed to ask more for his house or store because of its excellent location? The senator has a large field to labor in.

TO MY DOCTOR IN BED.

With much regret I hear it said
That you, dear doctor, are in bed,
Quite invalided.
For you the uninviting fare—
The broth, the gruel, made with care,
The milk—is needed.

I mourn, yet grimly chuckle, too,
When think that, not I, but you.
Should be a fixture;
Not I, but you, must sadly sip,
With utterly unwilling lip,
Some awful mixture.

Not I, but you, must now obey
What dictatorial doctors say,
So interfering!
I might, perhaps, be less averse
To some attractive youthful nurse,
And find her cheering.

In weather such as we have had
Your fate may not have been so bad;
In bed one lingers
When blizzards bite the bluish nose,
When cold half numbs the tortured toes,
The frozen fingers.

So I perhaps should envy you,
With nothing in the world to do
But idly dozy.
And, disregarding snow and storm,
To just be comfortably warm
And snugly cosey.

To pass the time, your pulse you feel.
And dream of charms all ill to heal,
Like some magician;
In mirrors you may see your tongue;
You cannot listen to your lung,
My poor physician.

You read the *Lancet*, I should say,
Or books on your complaint, all day,
Stiff bound or limp tomes;
And when you put the volume by
You lie and sigh and try and di-
agnose your symptoms.—*Punch*.

ASPIRATION OF THE HEART.—Dr. Allian D. Sloan, has reported to the *Journal of the American Medical Society*, a case in which he plunged a trochar attached to an aspirator directly into the right side of the heart, through which some eight ounces of blood flowed. The occurrence happened in the case of a woman suffering from pericarditis with effusion. The woman was apparently dead from heart failure, and a hurried attempt was made to evacuate the fluid with the above result. He supposed when the blood flowed that the woman would die from the heart injuries. However the canula was withdrawn a little, the fluid evacuated, and to the doctor's surprise the heart began to beat again, and after an hour or two the patient regained consciousness,

two months later she was sent way in the country, and four months later was reported as being perfectly well.

The doctor expresses the opinion that among other conditions, heart failure from chloroform will be found to be one that will sometimes respond to the aspiration of the heart.

For one we can say that we will not try it for that purpose, but shall be pleased to chronicle results for any one who does choose to try it.

BOOK TALK.

Books reviewed in these columns may be obtained of Dr. A. M. Wilson, rooms 412 414 New Ridge Building, Kansas City, Mo. Discounts where possible.

A MANUAL OF BANDAGING.

A Manual of Bandaging, Adapted for Self Instruction. By C. Henri Leonard, A. M., M. D., Professor of Medical and Surgical Diseases of Women in the Detroit College of Medicine; Member of the American Medical Association; of the Michigan State Medical Society, etc., etc. With one hundred and thirty-nine engravings; sixth edition. 8vo. 160 pages. Cloth, price \$1.50. The Illustrated Medical Journal Co., Detroit, Mich.

The proper application of a bandage marks the surgical ability of a practitioner in the eyes of the laity more than any other one point. It also contributes to the comfort of the patient wearing it in no small degree, and an ill fitting or poorly arranged bandage is an annoyance to all concerned, hence the value of this little volume. The first chapter (18 pages) is devoted to the consideration of poultices of various kinds, then compresses are considered and then the various bandages, how to make and apply them.

The book is so profusely illustrated and the illustrations so complete that one can see at a glance just how the various bandages are applied and has no trouble in understanding the text. The various methods of extension are described, and we think here the author or illustrator should have given us a foot piece of board, perforated for a rope and long enough to keep the two ankle straps from pressing upon the maleoli. The author describes the "wooden wedge" as a substitute (page 150) however. The last chapter is upon knots.

The chapters upon the various plasters and other fixed dressings are excellent and altogether it is a book which will be an every day companion and will improve us by its company.

THE PHYSICIAN'S VADE MECUM.

The Physician's Vade Mecum. A pocket reference book of valuable medical and surgical information. By Sebastian J. Wimmer, A. M., M. D., Author of "Notes on Human Osteology," Co-Author of "Memoranda and Tables of Human Anatomy;" Member of the Alumni Association of the New York College of Physicians and Surgeons (Columbia College); Metropolitan Medical Society; New York Press Club, etc., with additions by Frank S. Parsons, M. D., Editor of the Philadelphia "Times and Register;" Member of the American Medical Association; Massachusetts Medical Society; Formerly Lecturer on Diseases of Children, College of Physicians and Surgeons, Boston, (1889-1892); etc. Philadelphia: The Medical Publishing Company, No. 718 Betz Building. 1894.

This little book of 500 pages of a size fit for pocket use has within its pages several entirely new departures. One which is especially worthy of notice is the "Physician's Interpreter" in English, German and French. It covers about fifty pages and gives the common forms of expression of every day phrases in the three languages named. These include all the questions likely to be asked in the complete examination of a patient and is a valuable feature. The balance of the book is made up of reference

tables, disease symptoms, diagnosis and treatment of diseases, dose lists, emergency resources, etc. The little work contains also over one thousand prescriptions called from standard authors.

! PRACTICAL URANALYSIS AND URINARY DIAGNOSIS.

Practical Uranalysis and Urinary Diagnosis: A Manual for the Use of Physicians, Surgeons and Students. By Charles W. Purdy, M. D., Queen's University; Fellow of the Royal College of Physicians and Surgeons, Kingston; Professor of Urology and Urinary Diagnosis at the Chicago Post-Graduate Medical School. Author of "Bright's Disease and Allied Affections of the Kidneys;" also of "Diabetes: Its Causes, Symptoms and Treatment." With numerous illustrations, including Photo-engravings, and Colored Plates. In one Crown Octavo volume, 360 pages, in Extra Cloth, \$2.50 net. Philadelphia: The F. A. Davis Co., Publishers, 1914 and 1916 Cherry St.

This book appears in eleven full sections and an appendix. The first eight sections, forming Part I occupy two-thirds of the book (230 pp.) and are entirely descriptive. The ground is completely covered, and Chapter I on "general considerations" is a broad study of color, consistence, normal composition of urine, methods of collection and preservation, etc. The table on page 10 giving the causes and pathological significance of the various urinary colors is a valuable one. Section II, on the composition of normal urine, covers about forty-five pages and prepares the way for the consideration of the abnormal constituents. The arrangement of Section III to VIII, matter is a happy one; first a description of the abnormal substance; second its clinical significance, and third the methods of detecting it and proving its presence. The microscopic work is illustrated by cuts and plates, some of which are excellent, others poor.

Part II is devoted to urinary diagnosis and gives a resumé of diseases and disorders of the urinary organs, and goes far beyond urinalysis. It is a most acceptable work indeed and one to be often referred to,

THE YEAR BOOK OF TREATMENT FOR 1895.

The Year-Book of Treatment for 1895. A Comprehensive and Critical Review for Practitioners of Medicine and Surgery. In one volume of 501 pages. Cloth, \$1.50 Philadelphia: Lea Brothers & Co., 1895.

The eleventh consecutive issue of this annual summary of medical progress has been presented. There is nothing more essential than keeping posted and this book furnishes the condensed report of the year's progress up to the present time. The work this year has been well done as usual and is a credit to the publishers. Notice was given in the February INDEX of its early issue and we are pleased to note its appearance. The reader interested in a special subject can quickly post himself on whatever is new and good in treatment by a perusal of the chapter devoted to it, and the general practitioner can with facility turn to any topic by a glance at the index. Those desirous of reading up the literature of any subject can find no more convenient guide than the Selected List of New Books, New Editions and Translations. The volume is exceedingly cheap in proportion to intrinsic value and serviceableness.

DISEASES OF THE EAR.

Diseases of the Ear. A text-book for practitioners and students of Medicine. By Edward Bradford Dench, Ph. B., M. D., Professor of Diseases of the Ear in The Bellevue Hospital Medical College; Aural Surgeon, New York Eye and Ear Infirmary; Fellow of the American Otological Society; of the New York Academy of Medicine; of the New York Otological Society; of the New York County Medical Society, etc. New York: D. Appleton & Co., Publishers. Price, cloth \$5.00; sheep \$6.00.

The aim of the author has been to adapt the work to the needs both of the general practitioner and the special surgeon. The book is divided into five sections, containing in all forty-eight chapters or six hundred and thirty-four pages of very valuable read-

ing matter. Section one gives a general description of the anatomy and physiology of the ear. Section two is given up to diseases of the conducting apparatus. Section three is devoted to surgery of the conducting apparatus, and is one of the most valuable in the entire book. Considerable space in this section is devoted to middle ear operations, based upon the author's large personal experience, and a full account is given of the favorable outcome of those cases. The features brought to due prominence in this section have heretofore been slighted in many text-books on the ear. Section four treats of diseases of the perceptive mechanism. The final section is devoted to a consideration of complicating aural diseases, and presents the subject in a clear and concise manner, easy of comprehension, and hence the more valuable.

The element of medical treatment is by no means neglected; in fact a fresh stimulus is given to this department by a comprehensive study of all the new remedies.

The work is unusually well illustrated. Besides many natural size drawings, taken from specimens, it contains several large colored plates which are new and are remarkable for their clearness. These plates are not only marvels of beauty, but they are faithful representations of the subjects to which they apply.

The more one reads this book the more he is impressed with its completeness and usefulness. As a guide to both the general practitioner and the special surgeon it is unexcelled, being accurate, comprehensive and written in a pleasing style. The views therein contained are so plainly and forcibly expressed that the physician (be he a specialist or not), the teacher, and the student cannot afford to be without this valuable work if he wishes to keep up with the present advanced state of otology.

J. T. H.

LITERARY NOTES.

"O, will he paint me the way I want,
As bonnie as a girlie,
Or will he paint me an ugly tyke,
And be d——d to Mr. Nerli
But still and on and which ever it is,
He is a canty Kerlie,
The Lord protect the back and neck
Of honest Mr. Nerli."

This, one of the last verses ever written by Robert Louis Stevenson, is in reference to the portrait of himself, which is given to the public with his verse for the first time in the July *Cosmopolitan*. The lines might have come from the pen of Burns, and are inimitable in their way. The portrait was declared by Stevenson himself to be the best ever painted of him. In this same number of the *Cosmopolitan* Rudyard Kipling tells an Indian story, to which Remington adds charming illustrations; Mrs. Burton Harrison makes a serious study of New York society in "The Myth of the Four Hundred," and Kate Douglas Wiggin contributes a story of one of the most delightful of Welsh retreats. The *Cosmopolitan* was with this number reduced to ten cents per copy, and as a consequence, notwithstanding its large edition, it was "out of print" on the third day of publication.

THE ANNALS OF SURGERY for July contains an exhaustive review of "The Results of Double Castration in Hypertrophy of the Prostate," by J. William White, M. D.; an article by Mayo Robson, F. R. C. S., on "The Treatment of Spina Bifida by Operation," "The Immediate Suture of the Gall-ducts and Gall-bladder after Extraction of Stones," by John Wheelock Elliott, M. D. "The Radical Cure of Varicocele," by Francis Murry, M. D.; "The Treatment of Tubercular Abscess," by W. J. Taylor, M. D., and the usual selections and society reports. The editorial article by H. P. de Forest, reviews Boekel's record of sixty-four cases of resection of the knee without osseous sutures, without ligatures and without drainage.

P. Blakiston, Son & Co., 1012 Walnut Street, Philadelphia, beg to announce that they have in preparation for early issue an authorized translation by Dr. Albert B.

Hale, of Chicago, of a "Handbook of Diseases of the Eye," by D. A. Eugen Fick, of the University of Zurich. This is one of the most complete, thorough, and compact of text books. Among its other merits it contains a number of very handsome colored illustrations, not of rare or unusual cases, but of practical matters that will greatly aid the student and be of much service to the practitioner. The retail price will be from \$3.00 to \$4.00.

LITTLE ITEMS.

The female oculists of the United States number 180.

Dr. S. H. Blakely, has removed from Lamar, Mo., to Troy, Kas.

Dr. J. F. Binnie expects to spend the month of August in Colorado.

Dr. S. C. Scott has returned from Kansas and may locate in Kansas City.

The dispatches report four deaths from yellow fever in Vera Cruz, Mexico.

Dr. W. A. Wall has moved his residence to 9th street, corner Elmwood Ave.

Dr. A. R. Greenlee has opened his office at 15th street, Corner Jackson Ave.

As one result of the China-Japanese war a camphor famine is now threatened.

About 350 new members joined the American Medical Association at Baltimore.

Dr. Harry Hill has moved from Leavenworth, Kansas to Kansas City, Mo., for practice.

The skunk of the Western prairies is, at this season, a potent agent in the causation of rabies.

Dr. C. C. Stivers orders his INDEX addressed to Severance, Kansas, instead of Roselaud Nebraska, as heretofore.

A new local anæsthetic is in the field and will soon be announced to the doctors. It is said to be far superior to cocaine.

There are more than 300,000 persons, according to careful estimates, connected with the drug trade in the United States.

The *Renew* announces that the heaviest woman in America recently died at Millersburg, Ohio. Her weight was 675 pounds.

The American Medical Association has officially adopted the metric system, hereafter requiring all contributors of papers to employ this system.

The Mississippi Valley Medical Association will hold its next and twenty-first annual meeting at Detroit, Michigan, September 3rd, 4th, 5th, and 6th, 1895.

Dr. E. F. Eaton, of Brookfield, died suddenly June 29th of heart disease. He was 56 years old and had been a resident and physician of Brookfield for many years.

Damages of \$175 were awarded the plaintiff in Boston a few days ago, for the negligent delivery by a drug clerk of salts of tartar instead of rochelle salts as ordered.

Professor Thomas Henry Huxley died June 29th, 1895, aged 70 years, at his home in London, England. The cause is given in the dispatches as complications of influenza.

Dr. Emil Noeggerath, distinguished for his investigations on the subject of gonorrhea, and at one time professor in a New York Medical College, died on May 3rd, at Wiesbaden.

M. Pasteur was recently offered a decoration by the German government, in recognition of his labors in the cause of science and for humanity, but has refused to accept it.

The Kansas City Training School for Nurses has issued its second annual announcement. Dr. C. A. Dannaker still has direction of its affairs and the officers are the same as for last year.

Dr. A. H. Doty, Health Officer of the Port of New York, has recently set sail for Tampa, *en route* for Havana for the purpose of studying on the ground the urban management of yellow fever.

We desire to acknowledge the assistance of our bright and newsy contemporary, the Gross Medical College *Bulletin* in making up news items this month. The *Bulletin* is a bright, well edited journal.

The present epidemic of typhoid fever in Stamford, Conn., due to infected milk, is another strikingly corroborative demonstration of the value of careful examination into the relations of cause and effect in suspicious cases.

Dr. Herman E. Pearse, the editor of the *INDEX* will be absent from the city for several weeks. Mail addressed to Kansas City, however, will be forwarded to him. The doctor and family will spend August in Colorado.

And now that the *Journal of the American Medical Association* is to "hedge" on printing the advertisements of proprietary medicines, will come the wrangle over the classification of matter,—what is "taboo" and what is not.

Dr. Bransford Lewis, of St. Louis, having resigned his position with the Missouri Medical College, has been elected Professor of Genito-Urinary Surgery at the College of Physicians and Surgeons; and Genito-Urinary Surgeon to the Baptist Hospital.

A poorly paid doctor means a poorly served constituency; not from neglect on the doctor's part but from the disadvantage he labors under, whose finances always cramp and push him. Make the charges conform to the patient's circumstances and collect them.

The Kansas Medical College of Topeka, Kansas, has adopted a four years' course of study and says, "The practice of medicine is a life work. * * A four years' course is none too short a time to prepare a young man or woman to begin to deal with human life."

What is said to be the most expensive thermometer in the world is in use at Johns Hopkins University. It is an absolutely correct instrument, with graduations on the glass so fine that it is absolutely necessary to use a microscope to read them. It is valued at ten thousand dollars.

The death of Professor Thomas H. Huxley will leave a vacancy in the circle of scientific men of the world that will never be filled. He was an intellectual giant, a man among men, towering above his fellows intellectually, and even those who disagreed with his teachings most bitterly, concede his superior power.

We are in receipt of Vol. I, No. 1, of the *Eye, Ear, Nose and Throat Clinic*, a quarterly journal edited by Flavel B. Tiffany, M. D., James E. Logan, M. D., and John Punton, M. D., and published in Kansas City, Mo. The new journal is decidedly neat and classical in appearance and promises to be successful.

Dr. P. P. Trueheart has moved to Sterling, Kansas, his former home. The doctor has resigned from the teaching staff of the Kansas City Medical College with which he has been connected for the past year as Demonstrator of Anatomy, and in which position he has given excellent satisfaction.

The *INDEX* office desires to obtain copies of the Kansas City *MEDICAL INDEX*, dated July, November and December, 1894, and January and April 1895. Parties having the same and not desiring to keep them, can return them to this office, and be credited on subscription account with twenty cents for each copy.

Dr. R. M. Hollingsworth retires from the editorship of the *Journal of Materia Medica* in July. We wish him joy in the days of rest that follow the cessation of his labors. He has made the *Journal* a good paper and an acceptable exchange. Dr. Marion A. Johnson succeeds him, to whom we extend our congratulations and wishes for prosperity and success.

Dr. John Punton will entertain Dr. B. Sachs of the New York Polyclinic sometime during this fall. During Dr. Sachs' visit he will address the Academy of Medicine upon the subject of Syphilis of the Nervous System, upon which subject he is high authority. Dr. Landon Carter Gray will address the same body later. Physicians living near the city should not fail to be present when the addresses are given. The dates will be announced later.

READING NOTICES.

Dr. Da Costa says that an exclusive milk diet in typhoid fever does more harm than good. He recommends three parts of milk alternated with one part broth.

Messrs. Helbing and Passmore, the great English Chemists, have pronounced Peacock's Bromides a preparation of chemically pure Bromides and far superior to the commercial salts.

The preparations of "Pepsin" made by Robinson-Pettet Co., are endorsed by many prominent physicians. We recommend a careful perusal of the advertisement of this well-known manufacturing house. (See page 10.)

SANMETTO.—Dr. Ben. H. Broadnax, of Louisiana, says in *The Charlotte Medical Journal*. (March, 1895), "I am satisfied that Sanmetto is the safest, pleasantest, and most effective genito-urinary alterative tonic I have ever tried."

STOP IT.—If your patient is already thin, and still losing in weight, he is suffering from malnutrition, and is on the road to phthisis. Stop this condition at once by administering two or more teaspoonfuls of Seng before each meal.

Elixir Six Iodides, Elixir Six Bromides, Elixir Six Hypophosphites and Elixir Six Aperients, (Walker-Green's) have been made uniform in price, viz: \$8.00 per dozen. These Elixirs are rapidly gaining the confidence of the profession. The latest circular can be obtained upon request.

WHEELER CHEMICAL WORKS:

Messrs.—Your agent while here left us a sample bottle of Naitol. I set the bottle on a shelf and thought nothing more about it 'till one day a man called with an aggravated case of tetter, one that had resisted all remedies known in this part of the world, and as a last resort, I gave him this bottle to try. He used only part to effect a cure. I then took the rest home and used it on one of my little boys, with the same result. Please send me one-half dozen. I want to give it a further trial.

Tampa, Fla.

Yours,
DR. H. R. BENJAMIN.

To My Fellow Practitioners:

I most heartily recommend Naitol in the treatment of the various forms of skin diseases, especially those presenting as a prominent symptom, itching and burning of the surface.

In the treatment of pruritis, I have found it superior to any other agent.

The above statements are made after having prescribed this preparation for three and a half years. The results have been eminently satisfactory in every case.

Lima, O.

F. L. BATES, M. D.

J. E. O'Connor, M. B., B. Ch., Leicester, England, says: "In a case of urithritis accompanied by cervical cystitis and urethral synovitis the administration of Sanmetto was attended with most satisfactory results. The drug appears to relieve the pain, reduce the irritation and produce healing and cessation of the muco-purulent discharge more speedily and efficaciously than any other remedy yet offered to the profession. In the case alluded to a marked improvement in the condition of the affected portion of the urinary tract was speedily followed by disappearance of the arthritic trouble. The patient had previously been treated with santal oil, salicylate of soda and acetate of potash.

ANTIKAMNIA—QUININE—SALOL—The well known therapeutical properties of these drugs make this combination desirable in such intestinal affections as Fermentative Dyspepsia, Diarrhoea, Dysentery, Duodenal Catarrh, Cholera Infantum, and Typhoid Fever. The Antikamnia controls the pain as effectually as morphine, and yet is never followed with any of those undesirable effects so characteristic of opium and its derivatives. Freedom from pain saves an immense amount of wear and tear to the system and places it in a much better position for recovery. The Salol acts as an antiseptic and removes from the intestinal canal the first or continuing cause of the affections just mentioned. The Quinine acts as a tonic, increasing the appetite, and thus contributing much to speedy recovery. Hare says that Quinine is not only a simple bitter, "but also seems to have a direct effect in increasing the number of the red blood corpuscles." A tablet composed of Antikamnia two grains, Quinine Sulph. two grains, and Salol one grain, allows of the easy administration of these drugs in proper proportionate doses.

Wm. E. Linn

KANSAS CITY MEDICAL INDEX,

EDITED AND PUBLISHED BY

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SEPTEMBER, 1895.

WHOLE No. 189.

ORIGINAL ARTICLES.

REMARKS UPON TREPHINING THE CRANIUM.*

BY JOHN ASHHURST, JR., M. D., PHILADELPHIA, PA.

Barton Professor of Surgery and Professor of Clinical Surgery in the University of Pennsylvania,
Surgeon to the Pennsylvania Hospital, etc.

I find that I have performed the operation of trephining the skull forty-one times, not including those cases in which I have merely opened the frontal sinuses, nor those in which I have removed bone-fragment without using the trephine. Of these forty-one cases twenty ended in recovery and twenty-one in death, showing a mortality of little more than 50 per cent. In many instances I have refrained from interference when other surgeons would have operated, so that my cases have been of an unfavorable type, and the mortality has no doubt been higher than if I had operated more indiscriminately.

The details of these cases are as follows: Twenty-four were primary operations for compound fracture, with eleven recoveries and thirteen deaths; two were operations during the intermediate period, both successful; and three were secondary operations with one recovery and two deaths, both in cases of abscess.

As far as it goes this analysis confirms what has so often been pointed out, that there is not as much urgency in operating upon compound fractures of the skull as there is in compound fractures of the extremities. In the latter, the sooner the operation is done, if the patient is able to bear it, the better. This has long been the rule in military surgery, when amputation is required, and some years ago I collected extensive statistics from civil practice which showed that the same rule of procedure applied there. But this is not so in compound fractures of the skull, and the proportion of recoveries is larger in delayed cases, than when the operation is done immediately, as is well

*Read before the Philadelphia Academy of Surgery, May 6th, 1895.

shown by Bluhm's statistics. At the same time, in a bad case, where an operation is evidently necessary, I do not advise delay; but early trephining is not so imperative as in early amputation for compound fractures of the long bones. Trephining for suppuration, occurring as the result of injury, is usually fatal.

In three cases I have operated for syphilitic disease, with two deaths and one recovery. In the latter case, beside evidence of syphilitic brain disease, there were painful nodes on the skull, and I operated by dividing the nodes with a Hey's saw, and then made a single opening with the trephine, so as to relieve the intercranial tension. The patient was much benefited for a time, and left the hospital relieved though not cured. The fatal cases were in patients suffering from syphilis of long standing, with necrosis and intracranial suppuration.

I have been induced to trephine in three cases of epilepsy, all the patients recovering from the operation. One, an epileptic with suicidal tendencies, came under my care at the University Hospital in October, 1886. After the operation the patient was much benefitted as long as he remained under observation. In the other two there was no evident improvement, though both did well as regarded the operation. In a case of melancholia, following an old fracture of the skull, trephining gave no relief, and of two cases in which I have operated for convulsions, etc., following old injury, one terminated fatally, while no permanent gain resulted in the other.

I have operated unsuccessfully upon three patients for the cerebral complications resulting from disease of the middle ear. Statistics show that many lives have been saved by trephining under these circumstances, but in my own cases, though the abscesses have been reached and evacuated, the patients have died.

Although I have thus operated in twenty-one fatal cases by trephining, in only one case did the operation seem to have been responsible for the patient's death. This case was that of a child with a depressed fracture over the lateral sinus. On removing the depressed bone profuse hemorrhage occurred, and the patient died in consequence. I had not then learned the futility of attempting to check bleeding from the brain sinuses, except by prompt plugging. I have had four cases since in which the longitudinal sinus was opened, and in two of them the patient recovered. In a third bleeding was readily controlled by pressure, but ultimately death followed; while in the fourth a clot had formed in the sinus, giving time to apply a lateral suture to the divided vessel. This case was an interesting one; it was that of a boy who had been injured by a nitro-glycerine explosion, a piece of the metal being found lodged in the longitudinal sinus, causing a clot as mentioned.

As regards the locality of the injury, I find that of fractures involving the frontal bone, omitting those simply involving the frontal sinuses, there were five, with four recoveries and one death. These figures do not confirm the general impression that there is special dangers in fractures of the frontal bone. Indeed, much more depends upon the amount of injury to the brain than upon the place of the fracture. In one case the indication for trephining was bleeding from the middle meningeal artery, and in that case the patient

recovered. He was an athlete, who, while playing football, came into violent collision with another player, sustaining a fissured fracture of the parietal bone. He was stunned at the time, but soon recovered consciousness; in the course of half an hour, however, convulsions came on, followed by coma. He was brought to the hospital, and I applied the trephine, evacuating a considerable quantity of clot; the patient made an uninterrupted recovery.

SARCOMA OF THE TESTICLE—OPERATION—RECOVERY. SECONDARY SARCOMA IN SPLEEN—DEATH.

BY EMORY LANPHEAR, M. D., PH. D., ST. LOUIS, MO.

Professor of Orthopaedic and Clinical Surgery in the Woman's Medical College.

Keyes (Surgical Diseases of the Genito-urinary Organs, 1888) says that cancer of the testicle is very rare, and "sarcoma is even more rare than cancer," Report of a case may therefore not be out of place.

M. D. T—, of Salina, Kansas, 46 years of age, I saw at his home September 5th, 1892, in consultation with Dr. W. B. Dewees who informed me that he had a rare case—one of sarcoma of the testicle; at least that was his diagnosis though Otis, of New York, had recently examined the patient and pronounced the disease carcinoma chiefly on account of its being of such rapid development and because sarcoma is most frequently bilateral. The history showed that for several years before the patient had noticed the right testicle as somewhat larger than the left, attention being directed to it by the increased weight and consequent dragging on the cord. It finally became evident that a tumor was developing and though the growth was rather slow he became anxious about it, as he had never had gonorrhoea or syphilis and could not account for its presence. Several physicians told him it did not amount to anything, etc. Sometime in the autumn of 1860 he fell and hurt the testicle very badly and soon afterwards noted that it had begun to grow much more rapidly; during the last six weeks it has nearly doubled in size. During the whole period of its growth there had never been even one twinge of pain.

Examinations showed a large, slightly uneven, elastic, oval tumor of the right testicle; squeezing produced a feeling of faintness but no pain; the scrotal veins were not enlarged nor were any infiltrated glands to be found as in cancer so far advanced. The cord was not affected and there were no adhesions to the skin.

With the assistance of Drs. Dewees and Switzer I removed the tumor, cutting the cord as near the inguinal canal as possible. The tunica vaginalis was not implicated so was closed with catgut stitches and the skin similarly, a large catgut drain being inserted. A compress of gauze was so applied as to bring the two serous surfaces closely together and thus prevent, as much as possible the accumulation of blood serum inside the sac. The first dressing was made September 19—on the 14th day. Healing by primary union had occurred.

Section of the tumor showed a surface measuring almost eight inches across, studded with vast numbers of small cysts from the size of a pin's head to a small marble, with fibrous tissue in abundance between, and here and there numerous queer-shaped branches of cartilage and a few nodules showing cretification—the peculiar features of a true cystic sarcoma.

There was no further trouble in the scrotum but something more than a

year afterward the man received a blow in the left side, over the spleen. Some time later a splenic tumor developed and I was written to from California, to which state he had removed, asking about an operation. I advised immediate splenectomy—which was rejected as too dangerous—and he died. I am informed that the post-mortem showed sarcoma of the spleen, but I cannot vouch for the accuracy of the diagnosis as a section was not sent to me.

2312 SALISBURY ST.

WHY SHOULD THERE NOT BE A STATE LAW FORBIDDING INCOMPETENT ASSISTANCE IN ALL CONFINEMENT CASES?

BY W. R. BROCK, M. D., HILLS, MINN.

Late Demonstrator of Anatomy Iowa College of Physicians and Surgeons, Des Moines, Iowa.

Perhaps the question heading this article has arisen dozens of times to every physician and surgeon who has been in active practice for any considerable length of time; yet with all the interest and attention it has received from the medical world, it has not been extended to the laity to the adequate extent of being carried to our law chambers and commanding a prompt, radical and favorable consideration from our State Legislators. It seems strange, nevertheless a fact, that fever is not a very uncommon disease in many of the rural districts of the "healthy north." And it is my observation in every case of puerperal fever which I have seen of late, was generated by septic infection from the so-called midwife's (woman of ignorance in attendance) hands, or by the absorption of blood coagula retained in the uterus which the ordinary midwife ("woman") is so incompetent to remove.

That there are many deliveries made in the absence of all intellect, and even where superstition forbids the presence of instinct, resulting in uninterrupted recoveries, cannot be denied. But such cases do not offer an excuse for the physician not being promptly on hand in every case of labor for the frequent emergencies arising in his absence which prove so disastrous to the happiness and oftentimes the lives of the unfortunate women.

It is also true that children are frequently exposed to scarlatina and escape the disease, but from this fact we could scarcely afford to deduct a reasoning by which scarlatinal buildings would escape quarantine.

A gentleman said not long ago that his wife had delivered several children without the aid of a physician, and in a short time after he made this statement, he employed a "woman" for his wife's confinement with the results of septicæmia and death following labor, and I am confident this woman was infected by the filthy hands of her attendant.

In case II, I was called thirteen hours after Mrs. K. was taken with labor pains, and found in attendance an old lady who claimed to have been employed several years by the Governor of Norway as a midwife and whom I had treated recently for eczema. Mrs. K. was totally exhausted and having pains every two minutes that were absolutely powerless. The child's head was normally presented and lying in the inferior straight. Mrs. K. was a primipara and

the outlet of the pelvis was small. The husband was informed that the child could be delivered only by the application of the forceps. At this statement the old lady became indignant and demanded that no forceps should be used, but that my hands and nothing more should be used. At such a crisis as this no one but the physician appreciates the value of the shriek of suffering woman, the prayers of the husband, the weeping of sympathizing friends, and the hysterical commands and demands of the nurse. But knowledge and true courage in such cases are the physician's only friends which enable him to gain a victory and demand the plaudits of his by-standers. Chloroform was administered and forceps applied. Shortly after the child was delivered she came out from under the influence of the anæsthetic and was seized by eclampsia. As hæmorrhage was profuse and the placenta attached, the hand was introduced into the uterus and the placenta "peeled" off and delivered. I then informed the husband that I could assume no responsibility for a bad result that might follow. That the midwife had been "fingering" with the genital organs all night with eczematous disease of the hands, with fissures upon the palms and dorsal surfaces which were clever recesses for all sorts of bacteria, and puerperal fever would probably follow; although the uterus was irrigated with a carbolized solution. This case occurred only ten days ago and no bad symptoms have been reported.

Another neglected case of parturition was that of Mrs. O. Mrs. O. and husband were young and did not believe in taking things out of poor old nature's incompetent hands, so employed no one. The woman was in labor six hours and gave birth to a dead child, a funis presentation being the cause of the child's death. Mrs. O. had a chill the third day following labor and a high fever followed the chill. Thirteen days after the chill she passed two pieces of decomposed coagula, each piece weighing a pound. With a high fever continuing two weeks and the expulsion of this putrid coagula, something was thought to be wrong and medical assistance procured. She was found to be weakly and anæmic, pulse 120, temperature 103. Involution was badly delayed and the cervix well dilated. The lady was put upon constitutional tonics and the uterus was irrigated with a 3 per cent. solution carbolized water. This treatment proved very satisfactory, as it will in the majority of cases of sapræmia. The irrigation was continued nine days. The temperature was normal after six days treatment and her strength and general condition greatly improved.

There is nothing new in the report of the above cases. Few articles merit that distinction in these recent days of medical and clinical knowledge. Upon the other hand they are cases which occur every day through careless husbands and blundering ignorance! and demand something nobler than the public silence. Labor is a "physiological process" but so often associated with pathological conditions, that at best it is considered a dangerous occurrence. And to exterminate the above evils, and to educate the laity to a grade of civilization of which they need not be ashamed, I would urge that every case in the latter stages of gestation be quarantined against old women and ignorance, and that the husbands be confined in jail 30 days for allowing

his wife to pass through labor without aid of a physician. It may appear to the reader that the author has a marked idiosyncrasy against old women, but such is not the case, for no one loves them better than he—God bless them. But it is the man who allows his wife no assistance in parturition, and afterward perhaps, mortgages his farm and property to pay the doctor for correcting the bad results of his selfishness, who should receive from the public the deepest censure and condemnation. And let us as therapeutical and prophylactic teachers publicly and fearlessly denounce the actions of such men and and we will no more than assume the duties and mission of a high calling can glory in the thought at last that we have been benefactors of the living, glowing "human form divine."

A BOARD OF MEDICAL EXAMINERS, VS. "THE DIPLOMA LAW."*

BY DANIEL MORTON, M. D., ST. JOSEPH, MO.

Attending Physician Home for Little Wanderers, Consulting Clinician Memorial Home, Late Editor *Medical Herald*, Associate Editor *Medical Fortnightly*, Assistant Surgeon St. Joseph and Grand Island R. R.

"All constitutional government is intended to promote the general welfare of the people; all persons have a natural right to life, liberty and the enjoyment of the gains of their own industry; to give security to these things is the principal office of the government, and when government does not confer this security it fails of its chief design."—*Constitution of the State of Missouri*.

The medical practice law of the law of Missouri was enacted at a time when legislative control of medical practice was in its infancy. Very little was known of the practical working of medical license law. Some states in their own way were endeavoring to work out a solution of the problem of legal control of medical practice, while others were not making any attempt at all in this direction. There was very little to be learned from former experience because the whole subject was comparatively new to the entire country. There was no concerted action between states. It was the day of experimentation. The then almost universal method was to create a Board of Health and empower it to enforce sanitary laws and license physicians. But ten years of practical experience with this law in Missouri and in other states, have now passed and it has been found that these two functions are so different in their character that men can not be secured who possess the requisite qualifications to discharge them both. Sanitation is one calling in this day of bacteriology sufficient to require the utmost exertions of any man to master. This is equally true of medicine, though each is closely associated with the other. Modern sanitation is a different thing from sanitation of twenty years ago, and medical science has not lagged behind its neighbor. A first-class sanitarian who is a first-class doctor is a *rara avis*. The friends of sanitation have found, also, that the licensing duty of a Board of Health militates against the sanitary duty. Those who are opposed to the legal control of medical practice, because it is pecuniarily disadvantageous to them, endeavor to secure the repeal of the

*Written for meeting of State Medical Association of Missouri at Hannibal, May, 1895. Read by title.

act creating the Board of Health, and thus both features of the law are endangered. Failing in this they not unfrequently prevent any appropriation being made for the use of such a body, and the law thereby becomes a dead letter. Should any appropriation be made it is often so small in amount as to practically accomplish the same object as no appropriation at all. For many years in Missouri this has been the case. The law remained upon the statute books, but its enemies were sufficiently powerful to prevent any but the most meagre appropriation for its benefit. Only when the cholera scare swept over the country two years ago did the legislature depart from this policy, but the appropriation made at that time was so hedged about with protecting conditions that it was not available for use except in the direst extremity. For these reasons sanitarians are alive to the fact that sanitation will always suffer if wedded to a medical license law, and they are therefore desirous of divorcing the two functions.

But neither does the law discharge the licensing function in a satisfactory manner. It is what is known as a "diploma law," that is graduates of medical colleges which are "recognized" are licensed upon presentation of a diploma from these colleges: A recognized medical college is one which complies with the requirements of the Board of Health in such matters as length of school terms, number of school terms before graduation, amount of dissection, of laboratory work of each student, and other details connected with the teaching of medicine.

This is a delegation of its right of judging the qualifications of those applying for license to the teachers in medical colleges who are always interested parties. Such delegation results in lowering the standard of knowledge required, and is absolutely objectionable. By this means it is impossible for the state board to have personal knowledge of the qualifications of its licensees. I give, herewith, a list of the medical colleges, legally chartered to confer the degree of M. D., in the United States. Missouri has sixteen medical colleges, three in St. Joseph, three in Kansas City, one Columbia, and nine in St. Louis.

"NUMBER OF MEDICAL COLLEGES IN THE UNITED STATES."

1. Alabama	1	17 Michigan	4
2. Arkansas	1	18. Minnesota	3
3. California	5	19. Missouri	16
4. Colorado	3	20. Nebraska	3
5. Connecticut	1	21. New Hampshire	1
6. District of Columbia	4	22. New York	12
7. Georgia	4	23. North Carolina	2
8. Illinois	11	24. Ohio	16
9. Indiana	5	25. Oregon	2
10. Iowa	7	26. Pennsylvania	6
11. Kansas	1	27. South Carolina	1
12. Kentucky	7	28. Tennessee	6
13. Louisiana	2	29. Texas	1
14. Maine	2	30. Vermont	1
15. Maryland	7	31. Virginia	3
16. Massachusetts	4	32. Wisconsin.	1
Total,			144

From this table it would seem that there are one hundred and forty-four medical colleges scattered among thirty-two states. Over these one hundred and forty-four schools must our State Board of Health keep constant censorship, for their graduates may, at any time, apply for license to practice in Missouri. Is not this a tremendous task and one impossible to perform? I will give just here the minimum requirements of the Missouri State Board of Health with which every college must comply to be recognized by said Board, and then the impracticability of the whole plan will be plain.

MINIMUM REQUIREMENTS OF THE STATE BOARD OF HEALTH IN MISSOURI.

1. *Condition of admission to lecture course.*—First, creditable certificates of good moral standing; second, diplomas of graduation from a good literary and scientific college or high school or a first grade teacher's certificate; or, lacking this, a thorough examination in the branches of a good English education, including mathematics, English composition and elementary physics or natural philosophy. (See foot note.)

2. *Branches of medical science to be included in the course of instruction.*—(1) Anatomy; (2) physiology; (3) chemistry; (4) materia medica and therapeutics; (5) theory and practice of medicine; (6) pathology; (7) surgery; (8) obstetrics and gynecology; (9) hygiene; (10) medical jurisprudence.

3. *Length of regular graduating courses.*—The time occupied in the regular courses or sessions from which students are graduated shall not be less than five months or twenty weeks each; (2) three full courses of lectures, no two within one and the same year of time, shall be required for graduation with the degree of Doctor of Medicine.

4. *Attendance and examination or quizzes.*—Regular attendance during the entire lecture courses shall be required, allowance to be made only for absences occasioned by the student's sickness, such absences not to exceed 20 per centum of the course; (2) regular examination or quizzes to be made by each lecturer or professor daily, or at least twice each week; Final examinations on all branches to be conducted, when practicable, by competent examiners, other than the professors in each branch.

5. *Dissections, clinics and hospital attendance.*—(1) Each student shall have dissected during three courses; (2) attendance during at least three terms of clinical and hospital instructions shall be required.

6. *Time of professional studies.*—This shall not be less than four years before graduation, including the time spent with the preceptor, and attendance upon lectures, or at clinics or hospitals.

7. *Instructions.*—The college must show that it has a sufficient and competent corps of instructors, and the necessary facilities for teaching, dissections, clinics, etc.

8. Graduates in pharmacy or dentistry who may matriculate as students of medicine shall receive credit for one year's study, but a diploma in pharmacy or dentistry shall not be considered the equivalent of a course of lectures in a medical school, unless the curriculum of the pharmaceutical or dental college issuing said diploma includes instruction in the subjects taught in a regular medical course for first course students.

9. In case the applicant cannot comply with the above requirements he or she may come before the board at a regular meeting and undergo an examination in writing in all the branches of medicine and surgery, in which the applicant in order to pass, must give correct answers to 80 per cent. of the questions asked.

10. A college in good standing with this Board shall be one in which the course of instruction is a graded one.

To my mind requirement seventh is the most impracticable one of the entire number. If every medical college in the land had exactly the same

teaching plant, the same microscopes, the same bacteriological outfit and the same chemical and physiological apparatus, of what avail without competent teachers? It takes something else than test tubes and microscopes to make a medical college. Teachers of learning are required, and how can the State Board of Health know the ability of teachers and the personal equation of each instructor in one hundred and forty-four medical colleges? How can the Missouri State Board of Health know that one hundred and forty-four medical colleges comply with the other requirements also? I leave each one of my readers to settle this question for himself. Such a law results practically in making the Board of Health a supervisor of medical colleges instead of an investigator of the ability of the applicants for licenses. Why whip the devil around the stump? Why shouldn't the Board at once turn its attention to applicants for license, and not waste its time in a vain effort to regulate medical colleges, a duty sufficient in itself to demand the attention of a Board of Education as suggested by Dr. Perry Millard. On this question this gentleman says: "Those of us whose painful duty it was to enforce the above named medical law knew too well the Herculean task we had undertaken. The barriers seemed unsurmountable and our only solace was the realization that our cause was just. It was my province to act as Secretary of the Minnesota Board for a period of five years, or during the life of the first Act. This act was substantially a copy of the act now in force in Illinois and several other states (Missouri among them.) My experience and observation soon convinced me that we had upon our list of recognized medical colleges a large number of schools whose alumni were not safe practitioners. An attempt to discipline institutions was met in a most belligerent spirit, or by an influence well suited to the ward politician or political blackmailer. I became fully convinced that the principle of recognizing the diploma of colleges was not the correct one.

* * * The propriety of determining the fitness of men to practice medicine by means of a personal examination was recognized and acknowledged to be the proper method by the State Board of Minnesota." Let me quote, also from "Bulletin Missouri State Board of Health. This will tell us of the experience of our own Board. "The examination of the record and standing of medical colleges throughout the United States and Canada, with all their different pathies or schools of practice, is a matter of great difficulty and delicacy. A uniform standard does not exist in all states, and there is no probability that it will in the near future. Of course all this causes irritation and division, and the more important functions belonging to a Board of Health are often crowded out by the work of inspecting diplomas, sitting in judgment on colleges, individual physicians and midwives, quacks, empirics et id omne genus."

At the 1891 session of the Missouri State Medical Association Dr. McAlester, of Columbia, who is now a member of the State Board of Health, read the admirable report of the Committee on Medical Education. That committee thus dealt with the diploma law. "Diplomas should not be taken by a state as legal evidence to practice medicine, as they are only an expression from the college that grants them. They are complimentary. To say the

least of it, it smacks of "class legislation." Licensing Boards and Diploma Boards are separate. The state, undoubtedly, has the right to say who shall practice medicine. The state can exercise no higher prerogative than to protect the lives of its citizens. It rests on the foundation of society itself. Hope of reward and the fear of punishment are the incentives that move men. The diploma is the hope of reward, license the fear of punishment."

I stated above that as a rule teachers are interested parties in the conferring of medical degrees. The medical colleges of the United States, with rare exceptions, are owned and run by the teachers composing the faculties, and have no means of subsistence other than the fees derived from students. As a result of this arrangement there is manifested a great desire, even a longing for medical students. The catalogues of many medical colleges contain the most alluring offers to young men. By personal interview and by private letter superhuman efforts are made to secure students, who would never have thought of medicine as a calling unless blinded by the representations thus made. Many are enticed into the study of medicine from other walks of life who do not possess the requisite preliminary training. In this way the greatest injustice is done these young men themselves, for when too late they awaken to the fact that they have been duped into a calling for which they are not fitted. Medical colleges belonging to this financial class want students, and so long as the diploma is equivalent to a license, students will want a diploma. They also want it at the least possible outlay in time and money, and these medical colleges will attempt to supply this want. The history of the Association of American Medical Colleges conclusively shows that, left to themselves, medical colleges will never be able to raise the standard of medical education without the greatest difficulty and in this statement I do not wish to traduce the minority of its membership, which has endeavored to control the majority for better education.

At this juncture I wish to introduce a table especially prepared for me by the kindness of the United States Commissioner of Education at Washington. It shows the financial facilities of the medical colleges of the United States for the years 1893 and 1894. The figures are the latest accessible ones.

"Value of grounds and buildings, of apparatus and amount of endowment funds of medical colleges, so far as reported for the years 1893-94."

CLASS OF MEDICAL SCHOOL.	VALUE OF GROUNDS AND BUILDINGS.	VALUE OF APPARATUS.	AMOUNT OF ENDOWMENT FUNDS.
Regular medical schools -	\$6,279,074	\$428,150	\$363,150
Eclectic medical schools -	279,500	16,000	
Homeopathic medical schools -	1,450,000	62,000	191,000
Physiomedical schools -	6,000	7,500	
Total, - -	\$8,016,574	\$513,650	\$554,150

Some change for the better is being made, due to the correlation of some medical colleges with university management, notably the New York College

of Physicians and Surgeons, and Columbia College. An endowed medical college in Missouri is a rarity, and yet we have sixteen medical schools, no other state in the Union having more, only one, Ohio, having as many. But schools will always exist as long as charters can be had for the asking. The increase in the number means severer competition, and then follows lowering of entrance and graduation requirements, and consequently lowering of the manufactured article—the graduate. A medical diploma, therefore, is a bare statement of the fact that its possessor has complied with the prescribed course of instruction of the school which issues it. It means nothing more whatever, and there are as many kinds of diplomas as there are medical colleges, for every college turns out a different grade of graduates.

Hence it has come to pass in the last decade that the "diploma law" is not in favor with the friends of a higher standard of medical knowledge for practitioners. A State Board of Medical Examiners meets with the approval of all who desire to see the present low standard in Missouri raised to correspond with that of other states. Medical colleges that give thorough instruction and, in the full sense of the word, equip their graduates to practice medicine are its advocates. It is the low grade institution which opposes it. An examination by a State Board of Medical Examiners has no terror for a competent doctor. It is an infringement upon the "personal rights" of an incompetent one. Let us have a law which recognizes no diploma and issues a license after an examination made under the authority of the State alone.

I can not do better in closing this article than to quote the admirably worded opinion of the Supreme Court of the United States, which settled forever the constitutionality of medical practice laws. It was delivered by Mr. Justice Field. "Few professions require more careful preparation by one who seeks to enter it than that of medicine. It has to deal with all those subtle and mysterious influences upon which life depends, and requires not only a knowledge of the property of vegetable and mineral substances, but of the human body in all its complicated parts and their relation to each other as well as their influences upon the mind. The physician must be able to detect readily the presence of disease and prescribe appropriate remedies for its removal. Every one may have occasion to consult him, but comparatively few can judge of the qualifications of learning and skill which he possesses. Reliance must be placed upon the assurance given by his license, issued by an authority competent to judge in that respect, that he possesses the requisite qualifications. Due consideration, therefore, for the protection of society may well induce the state to exclude from practicing those who have not such a license or who are found, upon examination, not to be fully qualified. *

* * * We perceive nothing in the statute which indicates an intention of the legislature to deprive one of any of his rights. No one has a right to practice medicine without having the necessary qualifications of learning and skill, and the statute only requires that whoever assumes, by offering to the community his service as a physician, that he possesses such learning and skill, shall present evidence of it by a certificate or license from a body designated by the state as competent to judge of his qualifications."

(*Dent v. West Virginia*, 129 U. S.)

NOTE.—Appended hereto is a letter written by a graduate of a “recognized” Medical College. It was taken from the *Tri-State Medical Journal*, but I have purposely omitted names. Did this pass “a thorough examination in the branches of a good English Education?”

“Dr.” ————— Letter. Copy.

Novemb the 26-1894.

————— Iowa

————— Dear Sirs

G — L — Shoed me a Letter he received from you asking him to Pay a Promisary Noat given — of — at that time Since has Mooved to — Mr Lynn was my Patient I treated Him for sore eyes Did him no good and went with him to — to See — and he agreed to Cure him for \$20.00 no Cure no Pay for I mad Contract Myself and only asked 6 weeks to Doo Same kept Boy there 3 monhs & Did Him no good as I Can Proove By Dr. — the Boy Didnot want to Pay him anything But — was going a way and Scared the Boy intoo a Noat Sayed he would have Him arested if he Didnot give it I went Down took him to Dr — had him examined — Prescribed for him and he came home I attended Him 4 week & her was well — Ondley looked at his eyes 2 or 3 times while there left him in charg of a Student as he was getting Ready to Moove and the Boy Does not think he Ows Dr. — anything Neithers Dos I think so.

————— M. D.

ARE WE AFTER THE QUACKS, OR ARE THE QUACKS AFTER US?

BY J. J. GAINES, M. D., EXCELSIOR SPRINGS, MO.

Let us illustrate the case. We enter a college, study hard for three long years, spend a big lot of money, and graduate. Then we must register, with both state and county. Why? Simply to protect the public, *and to protect ourselves*. The theory of protecting the public is very beautiful indeed, and is all right as far as it goes.

About the time we hang out our shingle the wonderful Dr. Bigfake comes to town; he is endowed with special power from God on high to cure disease; he does not use medicine; his skin is full of electricity; he has monkeyed with “heart trouble,” “stomach trouble,” “kidney trouble,” “female trouble,” “skin trouble,” and other troubles, till his magic touch is a terror to them. He is not a graduate, and has not registered. He opens an elaborate office, and begins his war on us. He berates us as a liar, thief, and highway robber. Old Mrs. Gullible goes to him and gets her womb “straightened.” Her marvelous cure is heralded to the world in every newspaper, for Dr. Bigfake pays well and is a liberal advertiser; he believes in printer’s ink and he hires the printer to lie for him. We happen to have a patient, and Dr. Bigfake makes it a point to see him. He shows him his superhuman abilities to “work out disease” and offers to cure him for nothing. We lose our patient.

We learn incidently that Bigfake has fifty or sixty patients, we hear some of the lies he has circulated about the regulars; we get mad and report him to the Board of Health. We want the protection we have paid for, and

we await with grim satisfaction the descent of the authorities on Bigfake's worthless carcass. It is a little slow about coming, and after a delay of six or eight months, we hear that he has been reported sixteen times, but *there is no money on hand to prosecute the case!* (How are other law breakers prosecuted?)

Bigfake continues to pile up cash, and sneers at the regulars, whom he deems a lot of butchers and cut-throats, and takes every occasion to so express himself. He has a lot of admirers, among whom are Mrs. Gullible, and Miss Fancygal, the latter having been miraculously cured after she had "missed" three times! The remarkable success of Bigfake stimulates other human healers, and they straightway leave the saw-buck and the hostler's stall and become "doctors." And the law cannot be enforced against this abortion producing class of swindlers, because there is no money! If the quacks are not after us, it is beginning to look that way.

There is from one to three of these glaring frauds in almost every town in Poor Old Missouri. If it is impossible to suppress this evil, and the down trodden country doctors have no means of relief, then do away with all the bosh about diplomas, and let every ignoramus sail in who feels like it.

A NEW SHOT COMPRESSOR AND FEEDER.

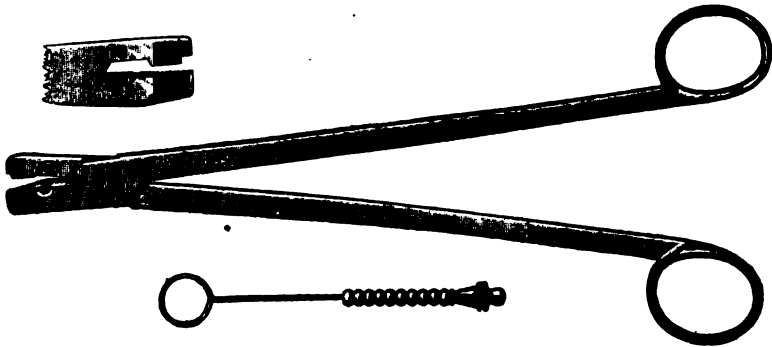
BY A. H. CORDIER, M. D., KANSAS CITY, MO.

Lecturer on Abdominal Surgery Kansas City Medical College.

Most operators doing perineal and cervical plastic operations are using silk worm gut as the suture material, and instead of tying the suture use a perforated shot, compressing the shot on the suture at the site desired. This has undoubted advantages over the old tying method or the twisting of the silver wire. The silk worm gut is by far the cleanest, most unyielding and best suture material for this class of operations.

In using the perforated shot the surgeon has found it very tardy and difficult work to thread them on to the suture with wet hands and with short sutures anchored between the patients thighs in the perineum, cervix or vaginal walls. Recognizing this fact young Morton, of Philadelphia, some years ago devised an instrument to feed the shot onto the suture. This instrument consisted of a shot mold in a forcep, with a funnel attachment leading into the mold. This was a step in the right direction, but did not go far enough, as, in using Dr. Morton's instrument, after threading the shot the threader had to be laid aside and the old shot compressor picked up, the shot put into place and compressed, this instrument laid down and the scissors picked up to cut the suture. This made necessary the use of three instruments. The instrument I have devised has the mold in the jaws of the shot compressor, with the funnel to facilitate the threading, and on one side, near the end of the jaw of the compressor is a finger nail blade that acts as scissors. In fact, the instrument is a shot feeder, a compressor and a suture clipper (scissors) combined. The instrument is made aseptic. It can be taken apart

like an ordinary hæmostatic forcep, being composed of only two pieces. (See cut.)



The shot mold is made to fit a No. B. shot. These shot can be purchased at any surgical supply house. In using, the proper size should be selected. The shot are placed on a stiff wire before they are delivered to the mold.

I desire to thank A. S. Aloe & Co., of St. Louis, for the efficient manner in which they have completed the instrument.

It does its work thoroughly, with a saving of much time in the performance of the operation.

RIALTO BUILDING.

COMMUNICATIONS.

Editor Index :

The preliminary program of the Detroit meeting of the Mississippi Valley Medical Association, September 3rd, 4th, 5th and 6th, 1895, is as follows: Charles J. Aldrich, Cleveland; Prognosis in Syphilitic Diseases of the Nervous System. John Aulde, Philadelphia; The Abortive Treatment of Typhoid Fever. Robert H. Babcock, Chicago; title unannounced. James M. Ball, St. Louis; Ripening of Cataract. William F. Barclay, Pittsburgh; Legitimate Pharmacy. William T. Belfield, Chicago; Asepsis in Bladder and Prostate Operations. A. C. Bernays, St. Louis; The Results and Conclusions Derived from an Experience of One Hundred and Sixty-five Appendicectomies. A. P. Buchman, Ft. Wayne, Ind.; Psychology in Medicine. A. E. Bulson, Jr., Ft. Wayne, Ind.; Toxic Amblyopia due to the Excessive Use of Tobacco. George W. Cale, St. Louis; Two Successful Operations for Insanity, with Remarks. Archibald Church, Chicago; A Neurotic Form of Wry Neck. L. C. Cline, Indianapolis; Laryngitis from a Rhinological Standpoint. Carter S. Cole, New York City; Ulcers of the Leg, all can be Cured. A. H. Cordier, Kansas City, Mo.; Technique of Abdominal Hysterectomy. Ephraim Cutter, New York City; The American Diagnosis and Treatment of Fatty Degeneration and its Masquerades. Edward B. Dench, New York City; The Treatment of Acute Inflammation of the Middle Ear and Mastoid Process. Travis C. Dennen, Hot Springs, Ark.; Syphilis and its Treatment. John Milton Duff, Pittsburgh; The Ordinary Duties of the Obstetrician. P. M. Forshay, Cleveland; Pyelitis with Report of a Case. Eugene Fuller, New York City; title unannounced. William A. Galloway, Xenia, Ohio; title unannounced. D. Tod Gilliam, Columbus; Uterine Fibroids, when to

Operate. F. C. Heath, Indianapolis; Some Sequels of Grippe. J. W. Heddens, St. Joseph, Mo.; Radical Cure of Hernia. Lobert C. Heflebower, Cincinnati; Excision of the Auditory Ossicles. Bayard Holmes, Chicago; Puerperal Sepsis, when is Hysterectomy Indicated? C. H. Hughes, St. Louis; Spot Specialism. Edward F. Jenks, Detroit; title unannounced. Emory Lanphear, St. Louis; Trephining the Spine for Pott's Disease, with Report of Eight Cases. H. M. Lash, Indianapolis; Vertigo, with Report of a Labrithine Case. Bransford Lewis, St. Louis; The Removal of Persistent Nodules after Epididymitis. J. E. Link, Terre Haute, Ind.; Fracture of the Femur. I. N. Love, St. Louis; The Bicycle from a Medical Standpoint. Theodore A. McGraw, Detroit; Annual Address on Surgery. F. Maass, Detroit; The Comparative Value of Medical and Surgical Treatment of Appendicitis. J. M. Matthews, Louisville; title unannounced. J. B. Murphy, Chicago; Peritonitis. Frank P. Norbury, St. Louis; Medico-Legal Consideration of Hysteria. H. O. Pantzer, Indianapolis; Post Climacteric Hemorrhages. William Pepper, Philadelphia; Annual Address on Medicine. Frederick Peterson, New York City; The Anomalies of the Ear Degenerates. Curran Pope, Louisville; title unannounced. Miles F. Porter, Ft. Wayne, Ind.; Coeliotomy in Purulent Peritonitis, with Report of Case. William Porter, New York City; title unannounced. Joseph Price, Philadelphia; The Revelations of the Trendelenburg Position. Merrill B. Ricketts, Cincinnati; (a) The Skin Diseases Amenable to Galvanism; (b) Local Anæsthesia by Faradism. Thomas O. Summer, St. Louis; title unannounced. J. O. Stillson, Indianapolis; Complication in Cataract Arising from Diabetes, Albuminuria, etc. Leon Strauss, St. Louis; title unannounced. J. H. Taylor, Indianapolis; How Shall we Rear Our Babies? Frank J. Thornbury, Buffalo; Auto-Intoxications. W. C. Weber, Cleveland; title unannounced. Edward F. Wells, Chicago; Pulmonary Tuberculosis, Its Early Diagnosis. K. K. Wheelock, Ft. Wyane, Ind.; Rheumatism in its Relation to the Eye. W. N. Wishard, Indianapolis; President's Address. John Eliot Woodbridge, Youngstown, Ohio; title unannounced. John A. Wyeth, New York City; title unannounced. Gustave E. Zinke, Cincinnati; title unannounced.

F. C. WOODBURN, Sec'y.

THE INJECTION TREATMENT OF REDUCIBLE HERNIA.

Editor Index.

The profession, everywhere, is awakening to the fact that the non-surgical, or injection method of treating reducible hernia, is a success. That failures have been reported is not surprising, as, in the enthusiastic stage of the practice, cases were attempted that were unsuitable. Others were improperly treated, or ineffective or dangerous fluids were used, while in still other instances the patients would not remain under treatment for a sufficient length of time to allow a cure. The first and second class of cases may and should be eliminated from the practice. The third is more difficult to deal with. Probably the most effective plan is to exact the fee in advance. This may range from \$25.00 to \$100.00, according to the case, and the ability of the patient to pay. If a man pays for his treatment in advance, he is much more likely to attend regularly for treatment, and as long as the operator may direct, than, if he may "pay when cured."

The injections are made once in every seven or ten days, and extend over a period of from six to twelve weeks, according to circumstances. I then keep the patient under observation for at least six months, with monthly inspection if possible, in order to be certain that the adhesions are firm and lasting. Time is not regarded of so much consequence as the certainty of cure.

An injection fluid to be thoroughly effective must be entirely safe, aseptic and antiseptic, be able to excite and maintain a proper amount of healthy adhesive inflammation, and to give rise to no unfavorable symptoms at any time. It is very easy to set up an inflammation in the tissues by injecting iodine, carbolic acid or other powerful but unsafe chemicals, often attended with very serious consequences.

The fluid that I use successfully and have supplied to a great many physicians, is a modification of the formula published in the *Medical and Surgical Reporter*, in September, 1894, being made more effective without adding to the price. It is very complex in composition and difficult to prepare, but it is remarkably effective, while no untoward results have followed its use in a single instance.

The instrument used may be either an ordinary hypodermic syringe, or one with my trocar and canula needle attachment. This latter prevents any possible injury to the cord. It has a trocar point, and after being introduced into the outer ring the canula is screwed down over the point of the needle, the instrument then being gently pushed up the inguinal canal with perfect safety.

With very sensitive patients or children, I use a small needle and pass through the tissue in an oblique direction, over the inner ring, and do not attempt to follow the canal. Judgment and experience must be the guide in such cases.

Femoral hernia may also be treated with the small needle, inserting the needle above Poupart's ligament instead of below it.

This method of treatment, if thoroughly done with a proper fluid, will give the most satisfactory results in reducible hernia.

W. H. WALLING, M. D.,

1606 Green St., Philadelphia, Pa.

HALL OF THE COLLEGE OF PHYSICIANS.

PHILADELPHIA, August 1, 1895.

The William F. Jenks memorial prize of five hundred dollars, under the deed of trust of Mrs. William F. Jenks, has been awarded to A. Brothers, M. D., 162 Madison Street, New York, for the best essay on "Infant Mortality During Labor, and Its Prevention."

The Prize Committee also reports as highly meritorious the essay on the same subject bearing the motto, "Vade Mecum."

The writers of the unsuccessful essays can have them returned to any address they may name, by sending it and the motto which distinguished the essay to the Chairman of the Prize Committee, Horace Y. Evans, M. D., College of Physicians, Philadelphia.

JAMES V. INGHAM,
CHARLES S. WURTS,
I. MINIS HAYS,

Trustees of the Wm. F. Jenks Memorial Fund.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

Editor Index :

The Secretary of this Association desires to announce that the railroad rates for the Detroit meeting, September 3rd, 4th, 5th and 6th will be one and one-third fare on the certificate plan.

In purchasing ticket to Detroit full fare will be paid.

On request the local ticket agent will furnish purchaser with certificate which will be handed to the Secretary at Detroit.

This certificate when signed and vised by the agent of the Central Traffic Association, will entitle holder to a return ticket at one-third regular fare.

FREDERICK C. WOODBURN,

Indianapolis, August 10th, 1895.

Secretary.

EDITORIAL.

THE WOMAN'S MEDICAL COLLEGE OF KANSAS CITY.

For many years the two regular Colleges of Kansas City have been asked to receive and instruct young women who desire to follow the profession of medicine as a calling in life. Both have refused. It has never seemed advisable to either faculty to open the doors of the colleges to students of both sexes alike. As to the propriety of this course on the part of these faculties we have nothing to say; the point is not in issue; the fact remains that women have been excluded. It is also a fact that many women desire to study and practice medicine and they certainly make competent physicians. Realizing these conditions to exist a number of our enterprising doctors have formed a Woman's Medical College to give to women who desire it an education in medicine and surgery equal to that given in other colleges of the same class. The faculty has been carefully chosen from among the good teachers of the city, and guarantees the standing and instruction of the new school. The lectures are to be given in rooms arranged for at 13th and Grand avenue, and the term opens October 15th, 1895, continuing until April 15th, 1896. The dean is Flavel B. Tiffany, M. D. and the President, T. J. Beattie, M. D. A four years course of study are required for graduation and requirements for admission are the same as those of other colleges in good standing. The INDEX extends to the new College its best wishes and predicts its prosperity.

EDITORIAL NOTES.

CHINESE MEDICINE.—Dr. P. C. Remondino, of San Diego, Cal., in his retiring address delivered before the Southern California Medical Society asks the question "Why should Chinese medicine find favor in the United States of America? He seems to have deeply studied the Chinese medical system and he skillfully lays bare some of its absurdities. The address is published in the *Southern California Practitioner* for June, 1895, and is well worth reading in full. He says: "Were we to suggest to the average of the American public that they place their anatomies and physiologies into the care and keep of the revived mediæval medical monks of the monasteries of the tenth and eleventh centuries as being fully intelligent and sufficiently enlightened to attend to their ailments, the average American citizen, proud of his achievements and of his progress, would at once resent such advice as an unmerited insult both to his intelligence and to his progressive spirit. This resentment, however, is only in a collective and in a theoretical sense, as there resides a degree of attractive and irresistible hypnotism or fascination about the solemn-countenanced, mild-eyed and tapering-fingered Mongolian medical practitioner, clad in his homogenous colored oriental garments of sky blue, that are altogether too fetching for the lone and marvel-loving individual, and with all of his enlightenment and all of his collected lore on the silver question, on the tariff, and on the Monroe doctrine, his ignorance of the history of medicine, or of

the comparative state of the science when contrasted with antiquity, or of the comparative state of the science in separate countries, the otherwise mentally rich American will, nevertheless, place himself in the hands of as cunning, as wily, and as ignorant as well as unscrupulous a lot of oriental practitioners as can double-discount any tenth century medical monk for antiquated ideas, absurdities of ideas, or for barbaric therapeutics, as well as for general irrationalism or unmitigated rascalism. That the Mongolian will treat his helpless anatomy with as little commiseration as his brother Mongolian of the Chinese Laundry will his shirts, is something that never occurs to him any more than it will occur to him that a medicine that knows no anatomy, pathology, physiology, or surgery, can know but little of any medicine. Unable to discriminate between actual ailments and such as are the creation of suggestion, as well as unable to distinguish between the results of technical treatment and that which results from self or some other form of hypnotism or from the natural operations of nature, the poor neurasthenic American is but a piece of softened and well oiled putty in the hands of the son of the mystic Orient, and he cheerfully contributes his mite toward the silver stream that flows to the westward in exchange for the skatological luxuries of the Orient, as the other ill-balanced and as easily deluded but wealthy American contributes on a larger scale to the golden stream that flows to the eastward, in exchange for impecunious counts and dukes. Our neurotic American meanwhile endows his celestial spoiler with a scientific skill and a knowledge not accorded to him in his own country, and his ease of acquirement of both reputation and wealth must make him roll on his rug with the greatest glee.

The Chinese medical practitioners are divided into two sets or classes. One class is educated at the Medical Hall at Peking, where they are taught the Chinese medical classics. The students of this class are selected from the families that have long practiced medicine. These practitioners are intended for attendants on the Imperial household, and for the great officers of state. The other class is composed of the quack element, and is of the itinerant order and is sublimely ignorant as well as knavish. The so-called educated Chinese practitioner studies at the Hall under a faculty composed of fifteen Imperial physicians, and of forty physicians of a lower grade, besides a small army of assistant professors and apothecaries.

The Chinese have a great religious aversion to touching a dead body, and this has prevented them from dissecting and thereby discovering the folly of their medical precepts and practice. This aversion to touching a body is so great that they will hardly touch a living one in a surgical sense, and from this rises the complete absence of any surgical or obstetrical knowledge among the practitioners. They practice acupuncture, but their reasons for doing so rest on no medical object, as the following anecdote will show: During Lord Macartney's embassy to China, Ho-choong-tang, the vizier, or Caloo of the Emperor was taken very ill, the Chinese court physicians counselled over the case, and after the expenditure of a great amount of wisdom concluded that a malignant vapor had insinuated itself between some of the great minister's anatomical framework, and that by roaming from part to part it had given rise to the acute pains and fitting distresses from which he suffered. From this mixed theological or demoniacal and medical view of the case, these very grave and solemn consultants, concluded that the best way to reach a cure was to make an outlet for this malignant and devil-raising vapor, and to this end they deeply punctured in various places the great vizier's agonized anatomy for the purpose of giving these vapors a free exit. Notwithstanding that the doctors were the most scholarly and wise in the nations, and attached to the person of the Emperor, or that the needles were skillfully wrought in silver and in gold, and introduced *secundum artem*, the poor vizier in all his greatness and power did, nevertheless, writhe about under the torture like an impaled worm; in fact, he was like the poor woman mentioned in the 25th verse of the 5th chapter of St. Mark, who "had suffered many things of many physicians and had spent all that she had,

and was nothing bettered but grew rather worse." The distressed minister was finally prevailed upon by Lord Macartney to allow the Embassy's physician to examine him. Dr. Gillen found him suffering from rheumatism and an inguinal hernia, and was soon able to relieve him from the pain of the one and from the danger of the other. The imperial physician even knew nothing of a hernia.

The Chinese doctor is not esteemed nor held in that honor or respect that we might expect from the laity. Even the best of their physicians are treated very much as we treat our quacks. He is only to make such calls as he is specifically called to make for which he receives from twenty-five cents to a dollar and a half per visit before taking his leave; much oftener he is only paid for the medicine he has ordered or prescribed. In a protracted illness it is not unusual for the family of the sick man to change his physician every day. The better class physician makes his visit in a sedan chair, takes a cup of tea and solemnly smokes a pipe in the ante-room before examining the patient's pulse—solemnity and impressiveness are very necessary adjuncts; he then prescribes or compounds his medicine, receives his dollar or more wrapped up in a piece of red paper which he pockets in an abstracted and indifferent manner and then departs still wrapt up in silence and solemnity; he does not call again unless requested to do so.

Man is, according to the Chinese, divided into three regions like the universe, so as to correspond to the sky above, to the earth beneath, and to man in the intermediate space. The first space as regards man reaches to the diaphragm, and this corresponds to the sky; the second space corresponding in man to the great scheme of the universe, contains all that we find immediately below that muscle, and consists of the stomach, liver and spleen; whilst the intestines, along with the bladder and the legs and feet correspond to the earth. The upper of these spaces is allied to the clouds, the middle region to rain, and the lower to the lakes and bogs. There is then a vital heat and a principle of humidity that is thrown into discord by the condition of the elements producing disease. Life begins in the morning, the vital and the humid spirits begin their race about the body, and the Chinese calculate that during twenty-four hours, they make 50 consecutive tours of the system, or one complete revolution in a little less than thirty minutes; during the same period, man is said to respire, expire and inspire, thirteen thousand five hundred times, and that each respiration pushes these vital spirits along on their course for the length of six inches, making for the day a total run of eighty-one thousand inches. The longest stretch or single journey that can be made in the body by these spirits is estimated at 1,610 inches.

Aside from each organ being supposed to possess its natural and its contrary pulse, or that of health and of disease, the Chinese further classify seven external impulses or those that belong to the innate heat, and eight internal pulses or those that belong to the radical humidity, after which come nine more pulses belonging to the great communicative channels. Each of these pulses, which are further sub-divided into many more, carry with their character certain unfailing diagnostic and prognostic signs. The great communicative channels above alluded to are believed to exist in connection with each special organ, and ramify from the fingers and toes to every organ so as to intimately connect the whole and allow a free passage to the spirits. When the Chinaman is sapiently feeling the American pulse he is thinking of all the above bewildering problems and a large octavo volume more additional of just such matter if he is educated, if he is not educated and only an itinerant he is simply putting in his time mentally computing how many pulses of American gudgeons he will have to linger over before realizing enough dollars with which to return to China and purchase a professorship in the Imperial College.

The rules for the examination of the pulse—the main accomplishment in Chinese practice—are very minutely laid down in their codes or medical works. These are some of the main points.

1st. The physician who visits the sick should be of sound body and of clear mind, and he should make his visits early in the morning and whilst he is still fasting.

2nd. He should examine into the sex of the patient, also whether he or she is fat or lean, aged or young, small or large.

3rd. He should carefully remember the location of the three principal pulses in each arm, as well as their correspondence to the internal organs.

4th. He should be able to discriminate between the natural pulse of each part and the contrary pulse.

5th. He should be able to recognize the principle seven external, the eight internal, and the nine communicative canal pulses, as well as he should be perfectly familiar with the twenty-six fatal pulses.

6th. He must fully understand the alteration caused in the various pulses by the four seasons, as well as the pulse that belongs to the flesh, that which belongs to the blood, to the nerves, and lastly the one that belongs to the bones.

The Chinese further imagine that the windpipe enters the thorax just as a faucet enters a beer barrel, and that the brain occupies only a small central space in the skull. With their peculiar ideas concerning the working of the vital air within the economy, they intersect the body with tables and canals for the passage of this vital air or gaseous spirit; these are supposed to run from the hand to the head and from the legs and feet to the various abdominal and thoracic organs. They know of no connection between the veins and arteries, and the heart is supposed to have but one cavity or to be constructed something like the bulb of a Davidson syringe. The marrow is in the brain and from this organ it proceeds to the reproductive organs. The lungs, they believe, regulate the temper, and they look upon the stomach as being the warehouse of the body, and upon the kidneys as being pillars of strength. Such are a few of the anatomical fantasies and physiological absurdities with which the Chinese gentleman of medical education has to be burdened down. It is no wonder he looks wise, solemn and owl-like: it would make most of us very solemn were we to stagger around under so much wisdom.

To reach the climax of their absurdities we must study their *materia medica*. The ridiculous, three or four thousand year-old, baldheaded and whitebearded absurdities of their anatomy and pathology may be said to be simply speculative and passive. At least it matters little to the sovereign American, that Chinese medicine says that his liver is on the left side or that his windpipe fits into his thorax like a sawed off piece of gas pipe sticking a few inches down into an empty cellar, nor is it very material to him that Chinese medicine would map out his anatomy so intersected with canals that it would be hard to distinguish him from a map of the city of Venice or an astronomer's map of the planet Mars; but when we reach Chinese therapeutics and *materia medica* we at once strike aggressive grounds, as it is no longer only a question of passive absurdities, but it is now a question of positive and aggressive nastiness and something interesting to the aforementioned American citizen, for however heaven inspired their ideas of anatomy or of disease may be, some of their therapeutics can certainly claim to be devil or internally inspired, if their source and quality is an index. The air, the earth, and the sea, as well as the lakes, rivers and the bogs, all are called to contribute their quota to this branch of their medicine. The juices, bones, secretions, excretions and dessicated tissues of various animals, even including all of the solid and fluid excrement from the great Lama himself, as well as the placenta from parturient woman, are here brought into requisition, and either in powder, confection, or in the shape of tea, are poured down the happy and confident throats of their faithful."

THE TREATMENT OF FETID EXPECTORATION WITH THE VAPOR OF COAL-TAR CREOSOTE.—In a recent number of the *British Medical Journal* a plan is recommended which has stood the test of several cases for curing fetid expectoration by the vapor of coal-tar creosote. The patient's eyes are covered with watch glasses held by adhesive

strips and the nose plugged with cotton as the vapor is very irritating to eyes and nose. He is then placed in a small close room, and a small quantity of creosote placed in a shallow pan over a spirit lamp. Gentle heat is applied at first, then stronger. The duration of the inhalation may be half an hour at first, gradually increasing the time to one and a half hours, and should be repeated once each day.

Seven cases reported show cure of the fetid expectoration with improvement in breathing and great improvement in the general health, in a course of ten weeks treatment.

THE BICYCLE vs. THE HORSE.—In many small towns the bicycle has taken the place of the country doctor's buggy. In the Western part of Pennsylvania, up to ten years ago, doctors were compelled to make journeys over a considerable distance of territory, but to-day every village has its one or two physicians, and the suburban and inter-urban trolley have brought the farmhouse quite near, so that the young doctor settling in a small community will be able to forego the expense of keeping a horse, unless he goes West, where, on account of the bad roads, two and three horses are required in a small practice.—*Medical News*.

THE ABOLITION OF A PROFESSORSHIP OF PATHOLOGY.—The Chair of Pathology has been abolished at the University of Michigan. Some time ago it was announced in the daily press that this action had been taken by the Board of Regents, but little credence was placed in the report, owing to the importance of the chair and the eminence of the occupant. Recent developments, however, have corroborated the newspaper account. Professor Heneage Gibbes will be retired at the close of the present collegiate year, the Chair of Pathology will be consolidated with that of Practice, and the two subjects will be taught by one professor and an assistant.—*Physician and Surgeon*.

NOT A UNIQUE CASE.—The curtain had risen on the third act and the momentary hush that preceded the resumption of the performance on the stage was broken by a stentorian voice from the rear of the auditorium: "Is Dr. Higginspiker in the house?" A tall heavily whiskered man occupying a front seat rose up. "If Dr. Higginspiker is in the house," resumed the stentorian voice, "he told me I was to come here and call him out at ten o'clock!" Whereupon Dr. Higginspiker, looking very red, picked up his hat and cane and walked down the aisle amid much loud and enthusiastic applause.—*Chicago Tribune*.

THE TREATMENT OF URTICARIA.—The *Reporter* quotes an exchange as giving the following treatment for hives, which may be remembered in connection with the treatment given on page 172 of the *INDEX* for May.

"Apply locally this salve;

R	Acid carbolic	-	-	-	-	
	Ess. peppermint	-	-	-	ss	m xv.
	Oxide zinc	-	-	-	-	
	Lanoline	-	-	-	ss	3v.
	Vaseline	-	-	-	-	3ij.

Mix. Apply to the affected skin.

At the same time order

R	Quinine muriate	-	-	-	gr. xx.
	Ergotine	-	-	-	gr. xv.
	Ext. belladonna	-	-	-	gr. ij.

M. ft. Pilulæ No. X. Sig.—2 to 6 each day."

PAIN REFERRED TO STOMACH.—Two lines which should find a place in the *vade mecum* of every physician are: "The pain of spinal disease is in the stomach," and "the pain of hip disease is in the knee." No prescription for recurring colic should be written unless it is preceded by a careful questioning of the health of the spinal column.

—*Ed.*

HIS FIRST SEIDLITZ POWDER.—The desire for new things was not confined to the Athenians. Even far distant Africa possesses it, if the story now current is true.

On the arrival of the first consignment of seidlitz powders in the capital of Delhi the monarch became deeply interested in the accounts of the refreshing draught. A box was brought to the king in full court, and interpreter explained to his majesty how it should be used.

Into a goblet he put the twelve blue papers, and, having added water, the king drank it off. This was the alkali, and the royal countenance expressed no signs of satisfaction. It was then explained that in the combination of the two lay the luxury, and the twelve white powders were quickly dissolved and eagerly swallowed by his majesty.

With a wild shriek that will be remembered while Delhi is numbered among the kingdoms, the monarch rose, staggered, exploded, and in his full agonies screamed: "Hold me down!" then, rushing from the throne fell prostrate on the floor. There he lay during the long continued effervescence of the compound, spurting like 10,000 pennyworth of imperial pop, and believing himself in the agonies of death.

HOSPITALS FOR TUBERCULOSIS.—At the recent meeting of the American Climatological Association the following preamble and resolution were unanimously adopted:

Whereas, Since tuberculosis has been demonstrated to be a communicable disease, it has become doubly desirable that hospitals for the reception of the poor afflicted with this disease should be established,

Resolved, That the American Climatological Association recommend the establishment of such hospitals in every State, not only for the relief of the great suffering attending this disease among the poor, but also as a protection of the community against its spread.—*Medical News*.

BOOK TALK.

Books reviewed in these columns may be obtained of Dr. A. M. Wilson, rooms 412 414 New Ridge Building, Kansas City, Mo. Discounts where possible.

TWENTIETH CENTURY PRACTICE.

Twentieth Century Practice. An International Encyclopedia of Modern Medical Science. By leading authorities of Europe and America. Edited by Thomas L. Stedman, M. D., New York City. In twenty volumes. Volume III. Occupation Diseases, Drug Habits, Poisons. New York: William Wood & Company. 1895.

The third volume of this great work treats of a variety of subjects, from alcoholism to mountain sickness and osteomalacia to sunstroke. The opening article is one on alcoholism and drug habits, by one of the greatest living authorities on the subject, Dr. Norman Kerr, of London. This is not a mere extract from the author's well known work on "Narcomania;" Dr. Kerr adopted the novel method of treating separately of the toxic effects of alcohol and other narcotics, and of the mania for intoxication, and his experiment has resulted in the production of perhaps the most readable and instructive essay on this vital subject that has ever been written. The second article is one on shock, by Dr. George F. Shrady, editor of the *Medical Record*. This is written in the author's easy style, and both as a scientific treatise and as a specimen of graceful English, deserves a lasting place in literature. Seasickness is treated of by Medical Director, Albert L. Gihon, of the United States Navy, than whom it would be difficult to find one better fitted by long experience to deal with this strangely obscure subject. Dr. Gihon also writes in this volume of heat-stroke and frost-bite, two subjects that would naturally fall within the personal ken of one who has passed more than one third of a century in the naval service in all quarters of the globe. Professor

Councilman, of Harvard University, contributes a short, but valuable article on osteomalacia. The subject of toxicology is dealt with in two articles, one by Professor Beaumont Small, of Ottawa, and the other by Professor James Stewart, of Montreal. In these articles only the important poisons are dealt with, those, namely, the effects of which the general practitioner may at any time be called upon to combat. The article on diseases of occupation, by Dr. James Hendrie Lloyd, of Philadelphia, is of unusual excellence, and stands out prominently as one of the best in this collection of masterpieces. The author has adopted the plan of classifying his subject according to the different influences that affect workers and professional men injuriously, thereby avoiding much needless repetition. By means of the excellent index at the end of the volume it is very easy to find what dangers beset those engaged in each occupation, as the different trades are there arranged alphabetically with references to the portion of the work in which their special diseases are dealt with.

LITERARY NOTES.

Not since "The Anglomaniacs" has there been so clever a society satire as Henry Fuller's "Pilgrim Sons," which is published in the August *Cosmopolitan*. The problems involved in woman's uses of the bicycle are so startling and so numerous, under the rapid evolution of this art, that one welcomes a careful discussion of the subject by so trained a mind and so clever a writer as Mrs. Reginald de Koven. The *Cosmopolitan* illustrates Mrs. de Koven's article with a series of poses by professional models. A new sport, more thrilling than any known to Nimrod, more dangerous than was ever experienced by even a Buffalo Bill, is exploited in the same issue in an article on "Photographing Big Game in the Rocky Mountains," before shooting. The idea that ten cents for the *Cosmopolitan* means inferiority from a literary point of view is dispelled by the appearance in this number of such writers as Sir Lewis Morris, Sir Edwin Arnold, Edgar Fawcett, Tabb, W. Clark Russell, Lang, Sarcey, Zangwill, Agnes Repplier, etc. Nor can we entertain the idea of inferiority in illustration with such names as Hamilton Gibson, Denman, Van Schaick, Lix, Sandham, etc., figuring as the chief artists of a single month's issue.

The complete novel in the September issue of *Lippincott's* is "A Case in Equity," by Francis Lynde. The scene is a "boom" town in the South, with the adjoining country to which a young Northerner went in search of health, and found it and some other things.

"Morning Mists" is one of Julien Gordon's strongest tales, though it has a very mature heroine and a very young hero. Charles Newton Hood tells "How the LaRue Stakes were lost," in a way highly creditable to the losers.

Helen Fraser Lovet, in "A Mute Milton," gives a revised version of a classic fairy tale. The Literary Woman at the Picnic, by Ella Wheeler Wilcox, evidently contains more truth than fiction.

Charles Stuart Pratt relates the history of "Napoleon and the Regent Diamond," which was of importance to the conqueror and to the fate of Europe in more ways than one.

Ellen Duvall writes on "Moliere." Edward Fuller has a sharp article on "The Decadent Drama." Calvin Dill Wilson tells all about "Crabbing," especially as practised in Chesapeake Bay. "The Survival of Superstition" is described by Elizabeth Ferguson Seat, and the rise and progress of "Clubs" by Lawrence Irwell.

The poetry of the number is by Susie M. Best, Carrie Blake Morgan, Clarence Hawkes, and Charles G. D. Roberts.

Dr. Mulhall, of St. Louis, in a paper before the American Laryngological Association has given his opinion upon the use of the cigarette and other forms of tobacco by the young and has pronounced against it.

LITTLE ITEMS.

Dr. C. W. Adams is spending the summer in New Mexico.

Dr. J. T. Craig is spending the summer in Colorado Springs.

Dr. N. Senn, of Chicago, is summering in Ireland and Sweden.

Gross Medical College, Denver, Colo., is to have a new building.

The new milk laboratory is still improving. Have you inspected it?

Kentucky has held its fortieth annual State Medical Society meeting.

Dr. Willis P. King is spending the summer at Manitou Springs, Colo.

Western Kansas and Nebraska are blest with plenty of rain this year.

Dr. A. H. Cordier and family are spending a few weeks in Kentucky.

The University Medical College has added another addition to its building.

Dr. Frank D. Askew is home from a fishing trip among the northern lakes.

Dr. J. H. VanEman has gone north on a pleasure trip among the great lakes.

Dr. Robert T. Sloan has returned from a pleasure trip to New York looking hale and hearty.

Dr. Geo. C. Mosher has moved his office to his residence, 613 East Ninth Street, near Holmes.

Dr. O. C. Thomas, Spring Hill Kansas, Class '94 Kansas City Medical College, was in the city recently.

The busiest place in Kansas City is at the site of the new building of the Kansas City Medical College.

The American Academy of Railway Surgeons will meet in Chicago, September 25th, 26th, and 27th.

Dr. N. J. Pettijohn, Chief Surgeon of the Memphis Route, is still improving. He can walk easily without crutch or cane.

A bill has recently been introduced into the city council of St. Louis to provide a salary for assistants at the city hospital.

Dr. Thomas N. Gunn, of Chapman, Kansas, was accidentally killed July 22d. Dr. Gunn was a prominent physician in his locality.

Dr. E. Lanphear is at present at Ashland, Nebraska. His health has been much impaired by over-work but he is improving again with rest and quiet.

The *Medical News* of Philadelphia says: "Competition will certainly make all men breakers of our code who find no 'inner reason' for not breaking it."

Do doctor's read the advertisements? They do indeed, as evidenced by the requests for copies of "Stories of a Country Doctor," advertised in the INDEX.

Dr. Chas. Lengle, the aged German physician who became insane recently, committed suicide at his home. He had been discharged from the asylum and was supposed to be well again.

We hope our readers will note and profit by our editorial in the August INDEX regarding the duty of the physician to himself and his own finances. Medical men are too lax in money matters.

Dr. Henry Palmer, of Janesville, Wis., was recently found dead in bed at his home. Dr. Palmer was one of the founders of the College of Physicians and Surgeons, of Chicago, and at the time of his death held the chair of surgery in the college.

Under the title of "Female Criminals," Major Arthur Griffiths, Her Majesty's Inspector of Prisons, furnishes an article to the August number of the *North American Review* presenting in a peculiarly attractive style his observations respecting many and varied types of female offenders.

The Pennsylvania legislature has passed an act forbidding any person to exhibit any "insane, deformed, idiotic or imbecile person in any public hall, museum, tent, theatre or building for a reward or consideration." Good law, that.

The authorities of Washington, D. C. have ordered all medicines for use with the poor to be purchased in tablet form from the manufacturers and dispensed by the physicians direct instead of allowing the doctor to write prescriptions as heretofore.

Dr. Frank Parsons Norbury who recently removed to St. Louis to assume the editorial management of the *Medical Fortnightly*, has been elected to the chair of Practice of Medicine and Clinical Medicine in the St. Louis College of Physicians and Surgeons.

Drs. Jabez N. Jackson and C. Lester Hall are preparing to attend the meeting of the Mississippi Valley Medical Association at Detroit, September 3rd to 6th. When the work of the meeting is concluded they will go to New York for a few weeks of post-graduate study.

Dr. Ingals says not to curette or cut away laryngeal tuberculosis and not to use cocaine. For an anodyne a mixture of tannic acid, carbolic acid and morphin, is best, and as a local application to the disease, iodine trichlorid gr. j to gr. ij to each ounce is best—better than lactic acid, which is good.

Most of the physicians who attended the meeting of the Tri-State Medical Society of Illinois, Missouri and Iowa, in April, 1895, at St. Louis, will remember Dr. Robert I. Harris, the skilled obstetrician. He has been very ill during the past two weeks with an attack of hemiplegia, the results of which threaten to be serious.

The Fifth International Congress of Otolaryngology will be held at Florence, Italy, from September 23rd to 26th. The Committee of Organization includes the following American names: Drs. C. J. Blake and Orne Green, of Boston; A. H. Buck, H. Knapp and St. John Roosa, of New York; C. H. Burnett, and Laurance Turnbull, of Philadelphia.

The *North American Review* for August opens with a trenchant paper on "The Menace of Romanism," by W. J. H. Traynor, President of the A. P. A. He contends that the papacy is to-day, as it ever was, a thorough despotism, and declares that the A. P. A. will continue its work to prevent the perversion of the American constitution to papal dogmas.

Parke, Davis & Co., that most excellent firm of manufacturing chemists whose name is familiar to every doctor in the land, have an advertisement in the *Journal of the American Medical Association* for August 17, 1895, covering eight pages which is a masterpiece; clear, clean, honorable, every word and line full of valuable information in fact, just like Parke, Davis & Co.'s work—perfect.

Rutus Waterhouse has left by will the bulk of his estate amounting to about two hundred thousand dollars, to St. Luke's Hospital for the purpose of establishing and maintaining the "Marv S. Waterhouse Memorial Ward," for consumptive sewing women who need attendance and shelter and also consumptives who are dependent upon sewing women for support.—*N. Y. Med. Record*.

The *Chicago Tribune* publishes a statement from a collection firm whose business consists entirely in the collection of doctor's bills. This firm says that over one-half of the patients do not pay their doctors fees. The *N. Y. Medical Record* thinks this is a mistake—that from 70 to 80 per cent. of fees charged are paid in most American cities, and that a larger percentage would be paid if doctors managed the business side of their practice in a more rational manner and rendered service more in keeping with the fees charged. We think the *Record* is correct.

The Third International Congress of Physiologists will be held at Berne, from September 9 to 13, 1895. Membership of the Congress shall be open to all professors and teachers of biologic science, belonging to a medical faculty or any other similar scientific body, as well as to all scientific men engaged in biologic research. The sessions of the Congress shall be devoted to physiologic communications and demonstrations. Further, communications relating to original research in anatomy, general pathology and pharmacology are acceptable in so far as they present features of general biologic interest.

READING NOTICES.

If your dyspeptic patient is "out of sorts" with loss of appetite, give him two or more teaspoonfuls of Seng before each meal; an appetite will soon succeed his heretofore indifference to food.

Chionia, the hepatic stimulant is attracting much attention in the medical profession. Its physiological action is that of a gentle stimulant to the liver and portal circulation, encouraging normal action of that organ. It is not considered a cathartic specifically.

"Paraldehyd" possesses many of the good without the evil qualities of chloral. Used in insomnia resulting from various causes. The objectionable taste of the chemical is, to a great extent, disguised in Robinson's Elixir Paraldehyd (see page 10), which is an elegant preparation.

Every physician has in his office some instruments that are useless on account of being rusty or tarnished or broken. If you will send these to the Physician's Supply Co., Kansas City, Mo. You can have them replated and repaired and in many cases made as good as new at a very moderate cost.

The Eye and Ear Hospital of Pittsburgh, Pa., will open its doors to patients July 1st, 1895. The Managers have secured the large and commodious building No. 945 Penn avenue, which has been thoroughly fitted for the care of patients requiring hospital treatment. Private rooms have been prepared for those patients who are able to pay for their accommodation, and bright and cheerful wards for the worthy poor. The Executive Surgeons will be in attendance at the Hospital daily. The Hospital Dispensary will be open (to the poor only) from 3 to 4 P. M. daily (Sunday excepted.)

HOW A PHYSICIAN INCREASED HIS PRACTICE.—It is my pleasure, and also duty, to report that my success with Sanmetto is far beyond expectation. It has effected a cure in every case for which I have employed it. It has been a complete success in kidney and bladder troubles. I have also used it in gleet and gonorrhea with perfect satisfaction. In some cases I add one drachm of ergot and tr. opii, or liq. strychnia to the one bottle, as circumstances may call for, and I always have a favorable result. In short I have to say that my practice has increased considerable since I commenced the use of Sanmetto, and I prescribe it daily.

N. J. LUND, M. D.

Marinette, Wis.

ACUTE MANIA.—Extract from a paper read before the Academy of Medicine of Cincinnati, May 13th, 1895, on "Acute Mania," by W. H. DeWitt, M. D.: "The medical treatment of these is very simple, and can be disposed of in few words. To procure sleep and quiet is perhaps the greatest desideratum, and I know of nothing so certain in its actions as chloral hydrate, given in 40 or 60 grains. It may be given alone or combined with one of the bromides. The "Bromidia" of Battle & Co., I have always found very reliable. It is almost certain to quiet and produce sleep. You will occasionally meet with cases that resist the influence of chloral even in large repeated doses; here opium or some one of its derivatives, either given alone or in connection with the chloral, will be found of service. If hypodermically administered, not less than $\frac{1}{4}$ grain should be given. Small doses only excite the patient and do more harm than good. Hydrobromate of hyosine has some advocates. The milder hypnotics, such as sulfonal, chloralamid, etc., are not to be thought of in these cases; they are practically inert and do no good — *Lancet Clinic*, June 22, 1895.

RENDER THE INTESTINAL CANAL ANTISEPTIC.—The *Materia Medica* gives at least one safe intestinal antiseptic. It is Salol. Professor Hare, in the last edition of his *Practical Therapeutics*, says that Salol "renders the intestinal canal antiseptic, and so removes the cause of the disorder, instead of locking the putrid material in the bowel, as does opium." He regards Salol as "one of the most valued drugs in the treatment of intestinal affections." Have we a substitute for opium for the relief of pain? Here comes in the American coal-tar products the first of which, for the relief of pain, stands Antikamnia. Therefore, we conclude that to remove the cause, to render the intestinal canal antiseptic, we have an invaluable remedy in Salol; while to remove accompanying pain, to quiet the nervous system, and to reduce any fever which may be present, we have a remedy equally efficacious in Antikamnia; an ideal combination for the treatment of this large class of diseases, and we may specially cite typhoid fever. These two drugs are put up in tablet form, called "Antikamnia and Salol Tablets," each tablet containing two and one-half grains of Aantikamnia and two and one-half grains of Salol.

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ORIGINAL ARTICLES.

UTERINE DISPLACEMENTS.*

BY BYRON ROBINSON, M. D., CHICAGO, ILL.

Professor of Gynecology in Chicago Post-Graduate School.

Several hundred physicians come to the Post-Graduate school annually for instruction in diseases of women. Two subjects above all other in gynecology, impress me. The first is that the general practitioner does not recognize and realize the significance of metritis. The second is that he frequently considers the displaced uterus the cause of the woman's trouble. He considers the displaced uterus as the primary disease instead of a mere secondary affair. I have taken special pains in investigating the subject of pelvic pathology in both the living and the dead. I think I have post-mortemed about one hundred female cadavers with the special object of learning the anatomical pathology. Pelvic pathology is difficult to comprehend and to rightly interpret on account of the changeable and periodic circulatory currents, on account of the excessive mobility of the organs without causing displacement, on account of the capacity of the organs to change their conditions and return to normal without losing their integrity, on account of deficient observation from rarity of opportunity. Besides so few physicians have made any definite practical microscopical study. In this little communication I wish to briefly, curtly and even dogmatically discuss uterine displacements.

In the first place I wish to stick to a few principles. It will be conceded that all pelvic organs are movable and anything which interferes with this normal motion produces more or less fixation. Hence, for our first proposition we will state the rock and base of the whole discussion, viz.:

*A lecture delivered at the Post-Graduate School in July, 1895.

A DISPLACED UTERUS IS ONE PERMANENTLY OUT OF POSITION.

Any uterus which will return to normal under natural condition is not displaced. The pregnant uterus will return to normal itself. A prolapsed uterus will not return to normal position itself. True, if the woman stood on her head or even lay down it might return, but that is aiding it. But surely the position of the uterus is not the primary cause of the disease. The cause of the disease dated far back from the present fixed uterine position. We do not deny that after a uterus becomes fixed in a distorted position for any length of time that the fixed position will cause disturbed circulation and nutrition—in short secondary disease. When one thinks that the normal uterus is constantly moving at every breath, song, step, that it is making excursions all day and night long, it becomes impressive. When this gliding, slippery, moving organ unfortunately assumes a pathologic phase and becomes fixed—dislocated. Then a dislocated uterus is one permanently fixed. But surely the fixation did not cause her disease. Now, the unfortunate and disastrous results of a physician believing that dislocation causes uterine disease is seen in the fool-hardy attempt to replace a uterus in order to cure the woman's disease. How many have been killed by forcibly or even non-forcibly replacing a dislocated uterus? And replacing a uterus is so unphilosophical. If it be moved into position it will follow the finger around the pelvis, so in this case replacement is paramount to tinkering. But if fixed, how much damage is done by tearing up adhesions? The cause of the displacement must first be removed. One might as well attempt to replace a pyramid by standing it on its top point instead of its base, as to attempt to replace some displaced uteri. But a few words in regard to further courses of the usual versions and flexions. To be very short in defining flexions we may say :

Ante-flexion is where the uterus is curved on its anterior surface and is abnormally fixed. Fixation characterizes any flexion. For example, a virgin's uterus is curved on its anterior surface, but it is not fixed. A virgin's uterus is frequently as soft as beef-steak and the finger can bend it any direction, but the ante-fixed uterus is fixed, it retains its fixed curves. (In all these remarks I am speaking pathologically.) It preserves its hook-shape, move it where you will. I know an ante-flexed uterus by its fixation, (be it from bands or metritis). The definition Dr. August Martin's father, 25 years ago, gave of an ante-flexion is simply nonsense. This famous, late, Berlin gynecologic master said that ante-flexion was known by the finger meeting the fundus of the uterus too soon on the anterior vault of the vagina. This definition is of no value whatever, for it will suit a healthy virgin uterus as well as a typically ante-flexed uterus. So that Martin's definition lacked just one idea and that was "fixation." Retro-flexion is where the uterus is curved on its posterior surface and is abnormally fixed. Martin simply reversed his definition for retro-flexion, but here again it lacked the chief essential, which is abnormal fixation, immobility and dislocation. Now what produces this fixation in flexions this their characteristic? It is generally metritis, secondarily peritonitic adhesions and thirdly tumors. In versions the pathology is more limited. An anteversion is where the uterus lies extended forward and

is abnormally fixed. What produces the fixation? Nearly always metritis. Inflammation of the uterine wall had stiffened and straightened out the uterus and it lies extended. Retro-version is where the uterus lies extended backward and is abnormally fixed. Of course other forces than metritis may fix a uterus in version, but it is improbable for it almost always requires metritis to make a stiff, straight, and extended uterus. What then is the treatment for a uterus dislocated, *i. e.*, one permanently out of its place? Why, it is to remove the causes, which are generally two, viz.: metritis and pelvic peritonitis (bands). Can either cause be removed by simply replacing the uterus, forcibly or otherwise? No, before the dislocated uterus will be replaced the metritis must be treated and the old bands must be removed or modified. The forcing finger, the dangerous sound or the unphilosophical pessary are not the best forces in treating dislocated uteri, *i. e.*, permanently out of position. They often damage the patient. What is more rational treatment? The large douche and boro-glycerine tampon, long continued. And if these fail the most rational is hysterectomy. Does curetting aid much in these old dislocated uteri? No, not unless there is an acute or chronic endometritis which is generally not the case except to a mild degree. However, the experienced diagnostician, if he has been fortunate enough to have observed considerable autopsic work, will be able to some degree to tell the patient whether she can be made better enough to be comfortable or whether she can be made comparatively well.

A JACKSTONE IN THE OESOPHAGUS, WHICH PRESSED UPON THE TRACHEA AND PRODUCED SUCH RESPIRATORY DISTRESS THAT TRACHEOTOMY WAS NECESSARY.*

BY WILLIAM J. TAYLOR, M. D., PHILADELPHIA PENN.

Professor of Orthopedic Surgery in the Philadelphia Polyclinic, Attending Surgeon to St. Agnes' Hospital, Assistant Surgeon to the Orthopedic Hospital and Infirmary for Nervous Diseases.

A little colored boy, aged three years, was admitted to St. Agnes' Hospital on the 3rd of April, 1894, with the following history. He was playing with some iron jackstones when he suddenly began to cough and to struggle for breath. He was seen by Dr. Theo. Sprissler a short time after the accident, who, although no one had seen the boy put the jackstone in his mouth, was convinced that one had been swallowed. He was unable by simple measures, such as the finger in the fauces and holding the child up by the heels, to give relief to the dyspnoea, and the child was then sent to the hospital.

When I saw him first, about two hours after the accident, there was such extreme respiratory distress that prompt relief was necessary. A careful search was made of the mouth and fauces with the finger, but without revealing the presence of a foreign body, and as the dyspnoea was too great to admit of a prolonged examination, I opened the trachea without giving an anæsthetic. As soon as this was done, and it was accomplished without difficulty and with really very little pain to the patient, the relief was instantaneous. No

*Read before the Philadelphia Academy of Surgery, March 4, 1895.

thing could be found in the trachea or bronchial tubes, and a silk catheter could be passed into the mouth from below.

I next passed a catheter down the œsophagus nearly to, but I regret to say not quite into the stomach, and also a pair of long-curved forceps, but without meeting with any obstruction or evidence of a foreign body.

A small silver tube was introduced into the wound in the trachea, and the child put to bed in a room specially prepared for him.

He was quite comfortable for two days, and during this time Dr. D. Braden Kyle, laryngologist to the hospital kindly examined the case with me, to determine whether a foreign body was still in the throat. He had the greatest difficulty in making an examination, and all that could be determined was the fact that the larynx was much congested, as though it had been injured.

At first the child was able to swallow fluids in small quantities with comparative ease, but during the time the tube was in place the difficulty in swallowing increased rapidly. He would take a drink of milk eagerly, hold it for a moment and then allow it to run out of his mouth. I thought that as the child was very small, and the tube somewhat large for him, this was the cause of the trouble, and that the tube was pressing upon the œsophagus from in front. I therefore removed it, and gave the resident surgeon strict orders to replace the tube upon the first signs of returning dyspnoea. All went well for about eight hours, when the difficulty in breathing recurred, and the tube was replaced without difficulty. Still the boy did not swallow nourishment as he should, and was losing strength rapidly in spite of rectal feeding.

I now determined to make another and even more careful search of the gullet, first with my finger, and then with instruments. Upon pushing my finger far down the throat I was just able to feel a smooth hard body, which proved to be the rounded point of an iron jackstone. By external palpation of the neck nothing could be felt that would lead to the supposition that a foreign body was present. After some little difficulty the jackstone was grasped in the jaws of a pair of curved forceps and removed. The care necessary to do this, on account of the large size, and irregular shape of the jack, made it a tedious process. The utmost gentleness was exercised in these manipulations, but the mucous membrane was somewhat torn, for quite an amount of bloody mucus was brought up.

The child died on April 8th from exhaustion, and as no post-mortem examination was permitted, the extent of the injuries done to the œsophagus and surrounding tissues can only be conjectured.

At the time of my first examination, just prior to the tracheotomy, I could not feel the jack with my finger passed well down the gullet, neither could I feel any obstruction to the passage of the forceps nor to the catheter, which I thought had passed into the stomach. Both must have passed below the point at which the jack was subsequently found.

The interference to the respiration was due entirely to the jackstone within the œsophagus which pressed upon the trachea, and not, as I had supposed, before operating, to the jackstone within the trachea itself.

This case has been a severe lesson to me, and has taught me that in all

cases of dyspnœa, supposed to be due to a foreign body within the trachea, a careful search of the gullet should first be made, and the probang should be passed into the stomach itself. Until this is done we must not open the trachea, provided this can be done without jeopardizing the life of the patient by too long and exhausting a search.

I can only explain the fact that I did not strike the jackstone with my forceps or with the catheter by the supposition that they passed between the prongs of the jack, and thus did not touch the substance of the iron, or else it was so far down the gullet that I did not reach it in my search. I report this as a warning to others that such an accident may happen, even when it was thought that all danger of such an oversight had been provided against.

One reason why more stress was not placed upon the fact that no foreign body was discovered at the time of the operation was the knowledge that no one saw him swallow the jack, and it was thought possible that it might have been coughed up, and the dyspnœa be due to the violence done to the larynx in its passage in and out.

In looking over the literature of this subject I have found the following case reported by Dr. T. M. Markoe (*New York Medical Journal*, May, 1886), which is very similar in many respects, and I quote it somewhat in detail:

A little girl, aged three years, put an iron jackstone into her mouth and swallowed it. Her mother could feel a hard body with her finger pushed well down the throat, but a physician who saw her almost immediately, could feel nothing. He passed a probang into the stomach, as he thought but met with no obstruction. The child was first seen by Dr. Markoe four days after the accident, and during this time there had been some little cough, but no dyspnœa or evidence that the child felt local pain other than the fact that she would not swallow solid food, although fluids were taken without difficulty.

A careful examination while the child was under the influence of ether with a lead probe detected a foreign metallic substance after the probe had passed five inches down the *œsophagus*, but there was no evidence of its presence on external palpation of the neck.

Very gentle efforts were made to extract the foreign body with forceps, but without success, and mucus tinged with blood showed the tissues were being torn by the manipulations.

The next day further attempts at extraction were made, and also to push the jackstone into the stomach, but without success. *Œsophagotomy* was performed on the left side by Dr. Markoe, who found the *œsophagus* had been perforated, and the jackstone lying almost entirely without the tube, having perforated its wall from within outward.

Whether it had been pushed through the wall in the efforts to dislodge it with the probang or not, it was impossible to say, but it was due to some form of mechanical violence and not to ulceration. The child died of exhaustion twelve days afterward.

DISCUSSION.

DR. JOHN B. DEEVER.—I have recently operated upon a lady who swallowed a fish-bone, which lodged temporarily in the *œsophagus*; but which,

however, could not be found. Her physician, Dr. J. B. Walker, upon the day following the accident, finding an emphysematous condition of the neck, asked me to see the patient with him. Upon examination I found not only emphysema, but also some fluid deep in the tissue of the neck. The effusion did not connect with the trachea. I cut down upon the swelling, evacuating a small amount of very fetid pus. At the bottom of the wound, located behind the lateral lobe of the thyroid gland, was seen some slough and an opening which communicated with the œsophagus. The bone was not found. The wound was packed lightly with iodoform gauze. Owing to the age of the patient, the difficulty in feeding her, and the extensive sloughing, death occurred within a week following the opening made in the neck.

DR. J. M. BARTON.—Some years ago I saw a case over in Camden of a child who had a jackstone in its throat similar to the case reported to-night. The size of the jackstone precluded the idea of its being in the larynx, although there was impairment of voice. The foreign body was discovered pressing against the back part of the œsophagus, where it caused ulceration, from which the child ultimately perished.

DR. DEEVER.—I have seen ulceration of the larynx result from the pressure of a foreign body in the œsophagus.

Some years ago I performed œsophagotomy for the removal of a partial plate of artificial teeth which had occupied the œsophagus for seven days. Death resulted from sepsis. Post-mortem showed ulcerative communication between the œsophagus and the larynx.

DR. R. H. HARTE.—At St. Mary's Hospital I saw a man, who in a fit of depression had wounded his throat and œsophagus with a razor, and in addition had plunged a red-hot iron into his right side and penetrated the liver. When he attempted to swallow liquids they regurgitated through the wound in the neck. The physicians present suggested œsophagotomy, and I recommended the passing of a tube down the œsophagus into the stomach through which he could be fed. This was done, and the patient recovered.

DR. WM. H. KEEN.—I can recall a number of cases of asserted swallowing of foreign bodies, especially fish-bones. The great difficulty in these cases is in determining whether the foreign body is really there. In the cases reported very careful examination failed to detect the presence of the jackstone. I would ask Dr. Taylor if any attempt was made to relieve the patient by feeding him with potatoes, to facilitate the passage of the jackstone. A few days ago I saw a physician who in swallowing a piece of toast, coughed a piece of the crust into his naso-pharynx. Acute pharyngitis followed, which extended up the tubes and caused mastoid disease. An abscess formed which burrowed to the pharyngeal wall. I operated upon him and chiselled away most of the mastoid. I mention this to show how much injury may be done by such a simple body. The man was in good health at the time it occurred.

DR. TAYLOR.—Dr. Keen speaks of feeding the child upon potatoes. The difficulty was, that when I saw the child the respiratory distress was so great that I am very sure that unless tracheotomy had been done at once the child would not have lived more than a few hours. Moreover I have very little idea that there was a foreign body in the œsophagus at all, as I attributed the difficulty in swallowing to the pressure of the tracheotomy tube.

URETHRAL STRICTURES.—TREATMENT BY ELECTROLYSIS: APPLICABLE ALIKE TO ANY PORTION OF THE CANAL.

BY DRS. HOLLADAY AND BURTON, HOT SPRINGS, ARK.

Medical science and art stand ever abreast with the front file in the march of that progress characteristic of civilized nations. Not one whit in arrear

of Edison's electric ingenuities are the electro-therapeutics of to-day, not less useful, not less wonderful.

The treatment of urethral strictures by electrolysis no longer needs defense, as the theory has stood the crucial test of practical demonstration. That the method has its quota of opponents in the medical fraternity is not surprising, for there are to be found even among cultivated people those who do not as yet accept the theory of evolution and others who question the laws of gravitation. We have been intellectually pained upon reading more than one adverse criticism upon electrolysis where the fact was potent that the writer had ignored even the difference in the specific properties of the two poles; such investigators, more by work than words, are to some extent calculated to bring the system into disrepute, so also the practice of surgery might suffer adverse criticism were the scalpel placed in the hands of a tyro, definite knowledge and skill born of experience being as requisite in one as in the other to a successful termination.

Let us review briefly the etiology of urethral stricture. This may be presented in two words: inflammation and traumatism. No attempt shall be made at a classical enumeration of inflammations of the urethra, as this condition is due principally to the patient's misfortune in contracting a gonorrheal urethritis, to which has been frequently added the baneful effects of caustic injections; but of traumatism as inflicted secondarily by the surgeon in the performance of internal or external urethrotomy or divulsion more shall be said anon.

To Dr. Newman, of New York, is due the credit of having instituted the only rational treatment of urethral strictures before the profession to-day. His method is the one now followed by the leading specialists in Europe and America. The first conception of the application of electrolysis in the treatment of urethral strictures dates backward nearly fifty years; the conception remained in an embryonic condition for a score of years, until 1867, when there was ushered into the medical world an intelligent method, a strong, healthy birth, crying aloud and clamoring for public recognition. This new method differs in many essential features from the old, which consisted in using a strong current with the object of cauterizing the tissues. This is evident from the writings of French operators who referred to the process as a "galvano-caustique." Strong currents destroy tissue and produce cicatrices—not so disastrous perhaps as rapid divulsion, not less to be recommended than internal or external urethrotomy, for under each operation alike a cicatrix is the inevitable result. The short intervals too of seances excited new inflammation with subsequent contractures and *sequelæ ad infinitum*. The want of a fixed potentiality in the batteries then used played no unimportant role, for a too high potentiality cauterized and the results were sadly injurious, while a too low potentiality was, less sadly, ineffective. Of the defective electrodes in vogue under so crude a conception of the object to be accomplished no reference is needed.

The new method consists in the intelligent application of one scientific principle, *i. e., galvano-chemical absorption*. Scarcely an hundred years ago

the first known demonstration was given that an electric current would decompose a compound (water) into its compound atoms (hydrogen and oxygen). This law is not unknown to even superficial students of physics and chemistry. Upon this fact is based the rationality of electrolysis. Any compound body containing water and a salt is an electrolyte, and subject to this same inflexible law. Fibro-plastic material (urethral stricture) is a true electrolyte, and by the scientific application of the galvanic current can be absorbed. This is an uncontrovertable fact.

The method is applicable alike to all portions of the canal. What a worthy desideratum is thus presented to the surgeon; what a broad field of usefulness is opened to him, when from his hands fall the fetters of narrow limitation imposed by urethrotomy. Note the difference. Internal urethrotomy is limited to the penile portion of the urethra and restricted to the roof, upon which the incision is arbitrarily inflicted. Outside of the so-called annular stricture, the fibro-plastic material is to be found in a large majority of cases upon the floor or sides of the canal; then observe, an incision upon the roof enlarges the calibre, only temporarily, however, at the expense of healthy tissue; then the surgeon has inflicted an unwarranted traumatism, the fibro-plastic material remaining in statu quo, and despite the instructions of the operator, and the diligence of the patient the systematic employment of the sound for a prolonged period will not prevent a more serious contraction. The same general facts apply to perineal section. Gradual dilatation is negatively more rational, but the process is unsatisfactory and tedious, while the repeated passage of the instrument is not free of the danger of exciting new inflammation. Rapid dilatation or divulsion is simply barbarous and should be exchanged by conscientious practitioners.

Proper armamentarium is of prime importance in the treatment of urethral strictures. The dry cell chloride of silver battery furnishes a steady and reliable current. A current controller and milliampere metre are indispensable. The Newman electrodes meet every requirement and leave nothing to be desired.

MODUS OPERANDI.—No instrumental interference should be imposed upon an acutely inflamed urethra, so also subacute inflammation. After a correct diagnosis shall have been made, bearing in mind that all affections of the urethra are not strictures, the patient should then be prepared for the operation to follow. Subacute inflammation of the urethra will yield gracefully to sanmetto to which has been added forty grains of salol to the fluid ounce. The former exerts a beneficial effect upon the genito-urinary mucous membrane while the latter sterilizes the urine. Thus are met two important factors which in the aggregate go to make up a successful termination. Before operating see that the battery is in good working order and the electrode to be used absolutely clean. Place the patient on a table and wash the urethra with a mild aqueous solution of boric acid. If the meatus be small, great facility will be afforded by incising smoothly with a sharp bistoury, which is preferable to any form of meatotome. Select a Newman egg-shaped electrode three sizes larger than the calibre of the narrowest portion of the constricted

canal. Use a straight stem for the pendulous urethra or a short curve for the membranous or prostatic. Attach the electrode to the negative pole, the positive sponge electrode being placed at some indifferent point on the thigh or perineum, and with the battery at zero pass gently through the meatus and down to the stricture. Make no pressure beyond that of maintaining a gentle steady impingement against the stricture, force is never proper as the object in view is not mechanical dilatation nor divulsion but galvano-chemical absorption. With potentiality of fifteen to twenty cells, gradually move the lever of the current controller until the metre registers two milliamperes. Unless the strictures be extremely fibrous, *such as result from previous cutting or divulsing operations*, the electrode will soon glide of its own weight through the constricted canal; then slowly withdraw the instrument till the site of stricture be repassed, when the current should be reduced to zero and the instrument withdrawn. No local anesthetic is required, as the operation is nearly painless. The first seance should be of short duration, not longer than five minutes, and the current mild, not more than two milliamperes. This is a necessary precaution to test the susceptibility of the urethra. The interval of seances should be from four to seven days, during which time the urethra should be left severely alone, sanmetto and salol being administered as above. The next seance may be longer, seldom exceeding five to eight minutes, however, and a twenty to thirty cell current regulated to five milliamperes employed. A tunneled electrode threaded upon a filiform bougie will naturally suggest its need to the operator in proper cases. The long interval of treatment is advisable that no new inflammation be excited, although some patients would tolerate a daily sitting, but the gist of the matter is that absorption will continue for several days when once induced—a fact made evident by the freer entrance of the bulb employed at the previous operation. At each seance select a larger bulb. From three to eight weeks will suffice to effect a cure. The word *cure* is not adopted unadvisedly. If failure should follow, the fault will be with the operator, not with the system. The patient may be deceived as to his progress, so also the operator, by the occurrence of *spasmodic* constriction excited in the circular fibres by the galvanic current. This condition can be relieved by mild faradism applied throughout the length of the urethra, or by the instillation of a weak aqueous solution of atropine.

The advantages of electrolysis in the treatment of urethral strictures may be thus enumerated. The operation cures. The patient is not consigned to a "bougie life" as after other operative interference. There is no loss of time from business. There is no hæmorrhage, no urethral chill, no traumatism, no cicatrix, no incurvation of penis. The operation is comparatively painless and devoid of danger. No relapse.

The above statements are not the wild vaporings of an excited imagination, but sober conclusions formed from a long experience, a practical structure reared upon the rock-bed foundation of the eternal, unchangeable laws of physics and chemistry, woven by man's ingenuity into the applied science of electro-therapeutics.

FAMILIAR TYPES OF INSANITY.—THEIR DIAGNOSIS.*

BY JOHN PUNTON, M. D., KANSAS CITY, MO.

Professor of Nervous and Mental Diseases University Medical College, Consulting Neurologist to All Saints, K. C. F. S. & M., Pittsburg & Gulf, and Mo. Pacific R. R. Hospitals. etc., etc.

Gentlemen :—

The study of insanity is gradually receiving the recognition it richly deserves. There never was a time in the history of the progress of medical science when its importance was more keenly felt by all classes of society than the present.

It is only a short time since its study was confined to a few members of the profession, who devoted their sole time and attention to its care and management. But to-day there is a radical change taking place, which is manifest by a growing desire on the part of not only physicians but also the more intelligent laity, to know something concerning its true nature and character, and the former superstition and ignorance which associated shame and disgrace with mental disease is rapidly giving way to more enlightened views. While we hail with delight this great step in advance, yet we are constantly reminded that much remains to be done before we arrive at that state of perfection which is our duty and privilege. It is only when insanity is brought to our own door or afflicts those of our friends and relations whom we dearly love, that the full force of its dreadful consequences are truly appreciated and we awake possibly for the first time to a complete consciousness of our responsible duties as medical advisers. That the teaching of this most important branch of medicine has in the past been sadly neglected by the faculties of our medical colleges, no one will deny; but the medical students of our day have no excuse to offer if they fail to demand of the college they attend a practical didactic or what is better a clinical course of instruction in this valuable department of medicine. Even the medical faculties of our State Insane Asylums have also in the past wholly ignored the trust imposed upon them by our profession, by failing to furnish us in the form of text-books, clinics and reports of cases, the results of their vast experience with the vagaries of the insane, as well as its proper care and treatment. With possibly one or two notable exceptions even to-day there is no recognized American text-book on insanity written by a superintendent of one of our grand and noble State Institutions, and yet several of them glory in the fact that they have held such positions for ten, fifteen or even twenty years. What a marked contrast this is when compared with our British cousins, holding similar positions such as Maudesley, Bucknill, Tuke, Clouston, Bevan Lewis, Blandford, Savage, Ireland, and several others, all of whom are authors of international repute. The only American text-books on insanity of any note so far, have been written by *neurologists*, and yet our Asylum superintendents want to tell us that the neurologist is not qualified to offer opinions and give advice concerning the insane. They all agree, however, that more pathological and literary work should be done by themselves and the excuses they offer in not having done their duty along these lines are numerous, the chief of which is

*Read before the Central Branch Medical Society, Greenleaf, Kas., Sept. 10th, 1895.

political interference, lack of time, lack of sufficient funds, lack of proper scientific apparatus and many others. Those of you, however, who are interested in such matters belonging to State medicine can find much food for thought by reading Dr. Weir Mitchell's address to the Medical Psychological Society and the varied discussions which it has provoked, all of which appear in the more recent neurological journals. There is no doubt that much of their defense is true, but the woeful neglect of the same zeal that they manifest for things other than medical in their annual reports, leads the average physician to believe that practical medical psychology is a secondary consideration with them.

That the profession as well as the laity will in the future demand more practical results along the lines for which these institutions are intended, I think there can be no doubt, and more time will in the future be devoted to that part of their reports which deals with the "Cured or Recovered" and less to that portion which relates to "Additional Buildings," "Executive Conveniences," and the latest "Washing Machine." While it is true that the medical colleges as well as the medical officers of our Insane Asylums have in the past neglected their opportunities, the rank and file of the medical profession are also open to severe criticism and even censure.

In reviewing a large number of Insane hospital reports, it is lamentable to find how many refer to the fact that failure on the part of the family physician or the patient's friends to recognize the importance of the great pathological law, viz.: "The longer the duration of the disease the less the chances of recovery," and the claim is made that this is the responsible agent in a great measure for the large and growing number of the incurable insane. My experience with the insane, which covers a period of fifteen years, ten of which were spent in asylum practice, fully warrants this charge, and I say without hesitation that one of the greatest evils of this age in regard to the insane, is a lack of prompt and appropriate treatment in its early stages. This great error no doubt is often due to ignorance (on the part of both the doctor as well as friends of the patient), of the importance of early appropriate treatment, or failure to recognize the true nature and character of the malady. It is my purpose, therefore, to call your attention to a few facts concerning the diagnosis of the more familiar forms of acute insanity or those which specially concerns you as family physicians, leaving the more obscure, rare and chronic varieties for the alienist and other members of the profession, who devote their sole time to the study of psychiatry and medical psychology. It is a well known fact by alienists that nearly all forms of insanity are preceded by some form of mental depression or melancholia. Guelain was the first to elucidate this interesting feature and of its general correctness there can be no doubt. In this connection, however, we must remember that the various states of mental depression represent the sanest kind of insanity and that it is often not easy to draw the line between lowness of spirits commonly known as the "blues," mental depression and true melancholia. There is all the difference, however, in this discrimination as lies between physiology and pathology,—sanity and insanity.

The diagnosis, therefore is all important for it is not a very desirable experience for a physician to pronounce a sane man as insane or vice versa: The one is as bad as the other, and yet mistakes of this kind have been made in both directions quite recently in a city not far distant from here. Again it requires no skill to make a diagnosis when the insanity is pronounced and reflects little credit on the doctor's ability if in doubtful cases he allows them to remain under observation until the insanity becomes obvious to the laity, for in so doing he often forfeits the patient's chance of recovery. The diagnosis in the majority of cases of acute insanity, however, is comparatively easy. For instance we are not in doubt when we see the noisy, raving or hilarious chattering of mania, the gloom and despondency of melancholia or the fatuous silence and mental lethargy of dementia. But there are many cases of acute insanity in which these conditions are not well pronounced and yet if we wait and let time come to aid us in our diagnosis, the future of our patient is materially injured and on this very point lies the danger of its passing from the curable to the incurable stage. In every case we must decide *early* the nature and character of the condition present as well as recognize the importance of prompt and appropriate treatment and on these two facts hinge the future of our patient. In every state of the Union there are new cases of insanity occurring annually and the number of these are in proportion to the population: For instance, in Kansas, with a population of about one and one-half millions, it is estimated that about three hundred and seventy-five new cases will occur this year, or one in every four thousand of the population, while the total amount of insane to the population according to the late census report gives one to every seven hundred and ninety-six. Further analysis of this report also show that during the last ten years Kansas has *increased* her relative number of insane to the population *twenty per cent.*; Missouri on the other hand has *decreased sixteen and one-half per cent.*; while Nebraska has less insane to the population of any state in the Union, viz.: one in every one thousand one hundred and thirty-six. It is highly important therefore that the diagnosis of these new cases of insanity be made early and the gravity of their situation duly recognized and here is where the skill and education of the family physician is put to the test. If the insanity is well pronounced, of course the diagnosis is easy, but the duty of the family physician is not complete if he fails at this time to advise prompt and appropriate treatment and neglect of this is where so many fail. It is a well established principle that all acute insanity needs *isolation* in some form or another, and the sooner this is resorted to in any case the better.

Failure to recognize the force of this all important principle on the part of both the doctor and the patient's friends, is often the responsible agent in the conversion of a curable case into an incurable one. Granting that the family physician recognizes its importance, he however so often yields to the desires and wishes of his patrons, in not putting it in force, that he himself becomes a willing party in thus sacrificing the future interest of his patient. Now there are three avenues open to meet this expediency for every case and the choice largely depends on the financial circumstances of the patient.

In the first place he may be cared for at home providing you put in force hospital rules and are willing for the time being at least to convert a certain portion of the home into a hospital. In this case a thoroughly qualified nurse is needed and the patient of necessity isolated from the rest of the family. Again he may be so poor as to be unable to meet such an expense, then the State comes to his aid and offers him a place in the State asylum. The third avenue open to any such a patient is a private home or sanitarium and this while, being the most expensive is by far the best method and offers the better results in regard to cure. In the former case, it is a great temptation for every family physician to attempt to treat (at least for the first few weeks or months) the patient himself during which time he wholly ignores through ignorance or otherwise, the essential elements of what may be termed the curative methods of treatment. It is in this experimental stage that the true nature and character of the malady is often misunderstood and often a season of faithful attention and much anxiety on the part of all concerned the patient in spite of this grows gradually worse and the need of further assistance becomes apparent; unfortunately too often this trial-period is too prolonged and on account of the saneness of the insanity many important measures of treatment have been wholly neglected or not thought necessary until the patient's chances of recovery are greatly impaired. All authorities agree that it is in the recent stages of insanity that it is the most curable and this stage is gradually becoming lessened year by year. In my early asylum experience it was thought that the patient's chances of recovery was excellent where the insanity had not been present longer than six months. This recent stage, as it is termed, has since been gradually narrowed down until to-day the best authorities are very cautious in promising a cure after the insanity has existed longer than two months. The transition from the curable to the incurable state is often a very rapid one and cannot be easily recognized, although much depends upon the cause which again relates to morbid inheritance. While it is impossible to correctly classify all the various states belonging to insanity, either from their symptomalogical, etiologial or pathological standpoints, yet from a clinical point of view we are compelled to recognize the symptoms as the most important aids in diagnosis.

Every physician should be able to at least classify the more common types of insanity, especially those which are characteristic of the acute stage, and this can only be done by reference to the symptoms which usually refers to the mental condition. All authorities are agreed that the most common of all types of insanity is *melancholia*; this presents itself in a variety of different forms, but the chief characteristic feature of melancholia as a type of insanity is the persistent morbid mental depression; this may be accompanied with or without delusions, but when they are present in any form of insanity they aid us much in the diagnosis, as well as prognosis, for the reason that they do not appear at the commencement of the disorder, but indicate that it has existed for a certain length of time, and proceeded to a considerable degree; much depends therefore, on the presence or absence of delusions. In the common simple variety of melancholia delusions are never present but there

is a marked mental depression accompanied with insanity, which is more or less persistent together with headache, which is usually located in the occipital region, general malaise and a loss of body weight. There seems to be a marked relation between this latter symptom and melancholia which the various writers on insanity seem to have over-looked ; I have found it present in almost every case of acute melancholia and with me loss of body weight together with the other symptoms enumerated, is highly diagnostic of this form of insanity. In the more severe forms of melancholia delusions appear as a complication together with suicidal impulses. It would save a very great deal of sorrow and suffering, however, if every case of insanity was regarded as unsafe and hence liable to commit some overt act, for this reason such persons need a constant companion or nurse. How often we find this simple rule infringed upon, and as a consequence both suicide and homicide results. When melancholia has existed a certain length of time, which varies in different individuals it often passes into another form of insanity, we term *mania*. This form of insanity is marked by an exactly opposite mental state from that of melancholia presenting every degree of mental exaltation. Like melancholia it has its several varieties, but its chief clinical characteristic is the morbid mental exaltation. In its more simple forms the mental exaltation of mania resembles very closely the condition of a man under the influence of liquor, which is sufficient to produce changes in thought, word and action. No one wonders at such a person being more or less hilarious, talkative and foolish in his manner, but when such a condition suddenly appears in a man without any apparent cause and he undergoes a marked change in conduct and speech, which is persistent with more or less loss of self control, we are justified in concluding that he is suffering from one of the milder forms of mania. His every act betokens that his highest cerebral centers have lost their control. Such persons talk in an excited and rapid way, much more so than is their custom, and unless their true condition is duly recognized they are very apt to develop delusions, which render their chances of recovery much more uncertain. Their sleep is disturbed and they are disposed to be fickle and quarrelsome, indeed their whole conduct when compared with their former standard is at best foolish and unreasonable. This period of incubation, if I may so term it is usually unattended with delusions, but later on they are very apt to develop even in spite of the best treatment. A fact worth remembering is that in mania insane conduct generally precedes for a variable length of time the development of delusions, whilst in melancholia they generally manifest themselves much earlier ; all important is the diagnosis before they develop for their presence greatly hinders convalescence. The nature and character of the delusions accompanying mental exaltation, often assist us greatly in the diagnosis of one of the more common forms of mania termed general paralysis of the insane, indeed, the most typical forms of mental exaltation is found associated with general paralysis. Space forbids my enlarging in detail on this very interesting but serious (because it is so fatal) form of insanity. The chief clinical characteristics which aid us in its diagnosis are the physical, as well as mental symptoms. Dr. Blandford of London, says,

"I know nothing more difficult than the diagnosis here, if physical signs are wanting, nothing more easy if they are present." These are usually delayed until the second stage of the disease, which is manifest by the presence of delusions. They consist of a peculiar expression of the face which is dull and vacant looking, when spoken to, the patient becomes abnormally excited, accompanied with twitchings of the facial muscles and general tremor. The lips and tongue are also involved, which causes another very important symptom, viz.: defective articulation. Accompanying this there is an inequality of the pupils and exalted delusions. Blandford commenting upon this says: "Inequality of the pupils taken in conjunction with exalted delusions is perhaps the most pathognomonic signs of general paralysis." Not so much importance is attached to the stammering articulation, but if one pupil is larger than the other and fixed to light or contracts but little and this accompanied with delusions of exaltation, it is almost conclusive evidence of general paralysis. The other symptoms in connection with it in the early stage is an exaggerated knee jerk, while in the latter stages they become abolished; sometimes epileptic convulsions intervene, as well as more or less ataxia.

Another common form of insanity in which delusions play an important part is *paranoia*; this is characterized clinically by the presence of fixed and systematized delusions of persecution. For details concerning the diagnosis of this troublesome form of insanity, I cannot do better than refer you to my paper on "The Modern Crank and Mental Responsibility," published in the *St. Joe Medical Herald* of last year.

In the foregoing varieties of insanity so far considered, the great majority suffer from delusions, hallucinations and illusions, three symptoms which are exceedingly common accompaniments of states of mental depression and mental exaltation. Before concluding, however, I desire to call your attention to another class of mental disorders, whose chief clinical features are not those of mental exaltation or depression and are not marked by either hallucinations or delusions, but are characterized by *mental* enfeeblement or deficiency; these are of two kinds, first, those whose mental defect is congenital or the result of an arrest of development at an early age commonly termed imbeciles and second, those who from former attacks of gross brain lesions or as a result of old age, gradually become demented. Both these states like the preceding ones present every degree of weakness, indeed all mental diseases when long continued tend towards dementia; though children in mind, the first class are often found to be men and women in years, wickedness and vice. They are not idiots in the true sense for many of them acquire a fair amount of education, but are more or less deficient in reason, judgment and conduct. In the majority there is a tendency to low and depraved habits and if remonstrated with they show an absolute disregard for truth or right behaviour. In true dementia, due to old age, chronic insanity or gross brain lesions, the diagnosis presents no difficulties. The loss of memory, intelligence and feeling, the mere childishness of the patient taken in connection with his age, is sufficient to demonstrate his mental disorder and pronounce him unable to care for himself or his affairs. To sum up the whole matter as well as serve

as a useful guide in the diagnosis of the more familiar forms of insanity, I have tabulated the more important symptoms common to each of these types as follows :

I.—MELANCHOLIA.

- 1.—Marked and persistent mental depression, which may present every degree.
- 2.—Insomnia.
- 3.—Headache, chiefly occipital.
- 4.—General malaise.
- 5.—Loss of body weight.
- 6.—Constipation.
- 7.—In the more severe forms these may be accompanied with delusions and hallucinations, together with suicidal impulses and more or less restlessness or even stupor.
- 8.—Hereditary tendencies often marked.

II.—MANIA.

- 1.—Mental exaltation presenting every degree.
- 2.—Persistent insomnia with marked restlessness.
- 3.—Loquaciousness which may present every degree of irrationality.
- 4.—Excitable and foolish conduct.
- 5.—In the more severe forms these may be complicated with delusions, hallucinations and illusions, together with suicidal and homicidal impulses.
- 6.—Defects of speech.
- 7.—Irregular pupils.
- 8.—Paresis.

MENTAL ENFEEBLEMENT OR DEMENTIA.

- 1.—Mental deficiencies presenting every degree which may be congenital or acquired.
- 2.—Malformations of skull.
- 3.—Defects of special senses.
- 4.—In the more severe forms these may be complicated with epilepsy, paralysis or other severe forms of organic brain disease.

If this imperfect paper directs your attention to a neglected department of medicine my purpose in appearing before you to-day will be accomplished.

ANTISEPTIC MEDICATION TO THE RESPIRATORY TRACT.

BY R. C. COTTINGHAM, M. D., MOBERLY, MO.

The Germans theorize, the French criticise and the Americans utilize, is an old maxim full of truth. Koch having discovered the tuberculous bacillus and his discovery having been confirmed by the profession at large, it remained for some method of treatment to check the disease. Every physician who has had any experience in the treatment of pulmonary diseases and especially tuberculous troubles is well acquainted with the various methods of treatment and is equally familiar with the mortality of such diseases when treated in the old fashioned way. The objects which formerly demanded

attention were, rapid loss of flesh, general debility and the cough, or the objective symptoms. These symptoms were treated with tonics, fats, oils and various so-called tissue builders, and for the cough various combinations were given, usually with an opiate. This would to some extent relieve the anxious patient and serve to mask the disease until too far advanced for proper treatment. This method is even yet pursued by some physicians and no thought is given to the producing cause and as a rule the patients so treated die in due time from the disease, per se, or sequela of the disease. Having made special study of respiratory diseases in private and hospital practice, I desire to speak more explicitly of tuberculous pulmonalis treatment, although the same treatment acts admirably in chronic bronchitis, sequela of la grippe affecting respiratory organs, and in fact almost all chronic and sub-acute conditions of the respiratory tract. We must admit that the various diseases alluded to are from germ origin, such as tuberculous bacillus of consumption, pathogenic microbe of epidemic catarrh or influenza, pneumococcus of pneumonia, streptococcus of diphtheria, etc. Thus it can be seen that each disease has a special germ or bacteria which will reproduce the disease if inoculated in a healthy person.

The old method of giving tonics, fats, oils, etc., do good so far as sustaining nutrition and may possibly tide the patient over, until by chance, the germs may be exterminated or cease to be propagated, and only in this way were cures chronicled, and the tonic or nostrum last used, was blessed and recommended to the next sufferer, who is usually less fortunate and dies a medical atheist, even condemning patent medicines, which, are as a rule, the last resort. From the list of deaths I have now before me for one week, just ended in New York City, there were 222 deaths, 130 of these are reported tuberculosis, this makes almost sixty per cent. of all deaths for that week tuberculosis. This is more than an average. But the percentage is very great and no place is exempt. Why then should not the physician reflect for a moment? And ask his fellowphysician if he knows of any remedy to assist in lessening this disease. The Koch germs are as numerous as ever, and his lymph treatment was a failure as are also other lymph or serum treatment. We have the germ or microbe of disease to treat and if we cannot exert some influence directly we may do so indirectly. And it is to this method that I desire to direct your attention, not from mere theory but from actual practice, as facts are not fancied theories. The results obtained are from carefully diagnosed conditions which warrant me in saying that a large percentage of patients with earlier stages of the disease can be cured if treated with proper antiseptic medication. The direct or local treatment to the parts diseased is the method I have used. For this purpose you must have a properly constructed instrument, and then properly prepared antiseptics as it is a well known fact that germs have each a special antiseptic for its species, and the medicine that will destroy or check the propagation of one particular species may not effect another. The instrument which has been of greatest value to me and from which I am able to obtain the best results is one after my own device. It is constructed as follows:

It is made of highly refined, annealed, flint glass, is about seven inches in length and has a base of two and one-half inches, has an upper and lower chamber, with a perforated aluminum plate, and sponge filterer dividing the two chambers. The lower chamber contains a highly refined chlorine solution rendered alkaline. The upper chamber is the receptacle for a combination known as "antiseptine" or the active principle of concentrated antiseptics rendered volatile. A mouth piece connects with the upper chamber, through which the patient breathes the volatilized medicine and enables one without effort to pass the medicated air into the remotest cells of the lungs.

It will be observed that two powerful antiseptics are used in this inhaler. The chlorine solution alone being strong enough to destroy the bacillus subtilis and bacillus anthracis, both extremely difficult to kill, in a (1 part to 400) when allowed to act for only one or two minutes. While (6 parts to 10,000) will destroy the spores of these bacteria in two hours. Evidences of the wonderful preserving or antiseptic power of the medicines used in the inhaler, has been demonstrated as pieces of fresh animal flesh, after having been treated to a dilute solution and then exposed to the air remains free from any taint or decay. Thus proving that it will prevent decomposition or decay of animal tissue. Another evidence is that the sputa of diseased patients when treated to the medicines and used to inoculate the lower animals fails to reproduce the disease in the animal, while the same sputa will produce the disease if not treated with the medicine.

Other points to be derived from deep inhalation is that stimulating, tonic, and sedative properties are obtained which with the antiseptic embrace the whole category of properties required for such conditions.

The deep inhalation alone acts as a sort of massage to weaker lung tissue and serves to strengthen the air cells. I have now used this method for the treatment of respiratory diseases more than two years, having treated over five hundred cases of various kinds with most gratifying results to myself and patients. Having reached such a high percentage of favorable results that it would seem almost a specific for earlier stages of such conditions and many chronics seem to obtain relief. It certainly acts admirably as my patients and those of many reputable physicians are able to attest.

COMMUNICATIONS.

INDIAN TERRITORY MEDICAL ASSOCIATION.

Editor Index:

The Indian Territory Medical Association will hold its regular semi-annual meeting at Eufaula, Ind. Ter., Tuesday and Wednesday, December 3rd and 4th, 1895. The following program has been arranged:

SECTION ON PRACTICE.

Pneumonia—By G. W. West, M. D., Eufaula, I. T.; discussion opened by S. N. Allen, M. D., Webber Falls, I. T.

Typhoid Fever—By J. G. Rucker, M. D., Claremore, I. T.; discussion opened by R. L. Fite, M. D., Talequah, I. T.

Selection of Climate for Phthisis Pulmonalis—By B. F. Fortner, M. D., Vinita, I. T.; discussion opened by A. M. Clinkscales, M. D., Vinita, I. T.

Indigestion—By O. Bagby, M. D., Vinita, I. T.; discussion opened by J. D. Brazeel, M. D., Wagoner, I. T.

Diphtheria—By G. R. Rucker, M. D., Eufaula, I. T.; discussion opened by L. D. Crawford, M. D., Pryor Creek, I. T.

Strumous Diathesis—By C. P. Linn, M. D., Claremore, I. T.; discussion opened by P. Donabo, M. D., Afton, I. T.

Influenza—By R. I. Bond, M. D., Hartshorne, I. T.; discussion opened by F. L. A. Hamilton, M. D., Wagoner, I. T.

Insanity—By J. T. Wilson, M. D., Sherman, Tex.; discussion opened by B. Hackett, M. D., Fort Smith, Ark.

SECTION ON SURGERY.

Treatment of Un-united Fractures—By H. B. Smith, M. D., McAlester, I. T.; discussion opened by L. C. Tennent, M. D., McAlester, I. T.

Stricture of the Urethra—By I. P. Gumley, M. D., Sherman, Tex.; discussion opened by W. H. Harrison, M. D., Webber Falls, I. T.

Pelvic Surgery—By E. N. Wright, M. D., Atoka, I. T.; discussion opened by W. B. Miller, M. D., Tahlihinia, I. T.

Orchitis—By W. B. Pigg, M. D., South McAlester, I. T.; discussion opened by D. H. Burke, M. D., Webber Falls, I. T.

Abscess of the Liver—By J. M. Boling, M. D., Claremore, I. T.; discussion opened by W. H. Bailey, M. D., Eufaula, I. T.

Cystitis—By LeRoy Long, M. D., Atoka, I. T.; discussion opened by M. P. Haynes, M. D., Vinita, I. T.

Scalds and Burns—By E. N. Allen, M. D., South McAlester, I. T.; discussion opened by C. A. Pennington, M. D., Talequah, I. T.

Fractures in or near the Joints—By Prof. R. H. M. Dawbarn, New York City; discussion opened by W. C. Hall, Coffeyville, Kas.

SECTION ON OPHTHALMOLOGY AND OTOTOLOGY.

Suppurative Otitis Media (Chronic)—By H. Moulton, M. D., Fort Smith, Ark.; discussion opened by B. F. Fortner, M. D., Vinita, I. T.

Early Diagnosis and Treatment of Iritis—By T. M. Tayloy, M. D., Sherman, Tex.; discussion opened by E. Pleas, M. D., Oolagah, I. T.

Malignant Tumors of the Eye—By F. B. Tiffany, M. D., Kansas City, Mo.; discussion opened by J. M. Ball, M. D., St. Louis, Mo.

SECTION ON OBSTETRICS AND GYNECOLOGY.

Puerperal Eclampsia—By J. S. Fulton, M. D., Atoka, I. T.; discussion opened by R. A. Burr, M. D., Pryor Creek, I. T.

Metritis—By J. L. Blakemore, M. D., Muskogee, I. T.; discussion opened by R. T. Harrod, M. D., Checotah, I. T.

Uterine Displacements—By F. B. Fite, M. D., Muskogee, I. T.; discussion opened by J. C. Bushyhead, M. D., Claremore, I. T.

Placenta Previa—By G. A. McBride, M. D., Fort Gibson, I. T.; discussion opened by E. Y. Bass, M. D., Talala, I. T.

All regular graduates are invited to be present.

J. G. RUCKER, Sec'y.

Claremore, I. T.

J. S. Fulton, Pres.

Atoka, I. T.

EPITHELIOMA OF THE ESOPHAGUS.

On July 14th, 1894, there came to me a Mr. J. M., æt. 53, married, white, small of stature, and of frail physical constitution, with considerable emaciation which since February, 1894, had been rapidly on the increase. Family history negative.

Has been considered a rugged and healthy man up to four or five years ago, barring a chronic catarrh and being subject to chronic bronchitis.

He has been accustomed for many years to the use of whiskey and has been on numerous drunks, while at other times he kept himself "soaked."

He was a soldier of the late war and claims that his chronic catarrh was due to exposure during that time. About twenty years ago he suffered an attack of aphonia which was of long duration and from which he never fully recovered, his voice being hoarse at all times since.

He was subject to follicular pharyngitis and had a laryngeal type at the time of the attack of aphonia.

He at times placed himself under treatment and would become better, but not cured.

He was admonished time and again to leave off his drinking habit and did not do so until becoming a "Keeley graduate" some four years ago.

His stomach was in a condition peculiar to the "soaker" and gave him considerable disturbance at times. His appetite was variable. Bowels usually regular, slept well and was fairly well nourished until his throat difficulty began to increase in February, 1894, when it became impossible for him to swallow solids. He consulted one physician, then another and pursued a course of treatment at the hands of most of them, in fact, became a rounder. He finally got so that he couldn't swallow fluid and slops sufficient in quantity to keep up his vitality.

Upon an examination of his condition, my first impression was that of a growth of some kind in the larynx, but examination with the laryngoscope under cocaine revealed only a catarrhal condition and no growth. I then gave him a glass of water and told him to attempt to take a large swallow of it. No perceptible quantity was swallowed and there was some of it returned through the nose while a little of it went down the trachea causing considerable coughing. I immediately proceeded to spray the œsophagus with a 1 per cent. solution of cocaine, and, after waiting a few minutes attempted to use a probe but failed in so doing, but after considerable patience and gentle effort I slipped a No. 7 probe pointed bougie through what was a stricture of the œsophagus extending some five-eighths of an inch. I immediately sought to establish for my satisfaction as to what the character of the growth was. By use of the throat forceps I was enabled to gouge off a piece of friable material from the site of the growth and upon staining and examining microscopically with one-sixth inch oil immersion objective found it to be a growth, cancerous in nature. I had before me an epithelioma of the œsophagus.

The growth was situated quite high up, in fact immediately below the constrictor pharyngeal muscles. He complained of a continued pain, dull aching in character, which he located at the posterior surfaces of the thyroid and cricoid cartilages. I had a clear history of a progressive stricture of a secondary chondritis.

His general condition it was impossible to improve by mouth medication or alimentation. I did not, in his run down condition, hope for much per enema, still being the only avenue open to me I resorted to it.

His cachectic appearance contraindicated any radical measure for relief so I only palliated, informed him of my conclusions and told him he had not long to live, but in order to satisfy him thoroughly told him to consult the ablest specialist in diseases of throat, etc., that he could find, and upon doing so came back satisfied that I was correct. He lived only two months.

This case was in my opinion induced by the deteriorated condition produced by drink which maintained the chronic bronchitis, prevented any beneficial treatment for catarrh and the irritant effects of alcoholism.

Palliative treatment seems to be the only thing as yet we have to offer

for advanced conditions of such character in the alimentary tract at that point.

Operative procedure is necessarily of such difficult nature as to act as a bar to any interference.

Might there not be a chance ray of hope held out to the patient by the pyoktannin injections if recognized early?

Would electrolysis offer any inducements to retarding or curative effect?

On the whole the treatment is unsatisfactory and palliative measures have thus far been all we could offer our patients in such conditions.

G. F. MESSER, M. D.

Waupin, Wis.

CIRCULAR OF INFORMATION OF THE MISSOURI UNIVERSITY.

Editor Index :

The University has spent during the summer on its chapel, libraries, laboratories, gymnasium and athletic grounds, and for other furnishings, over \$70,000.

The contract has just been let for a new greenhouse on the horticultural grounds to be finished by 15 November, and four new laboratories have been added—for horticulture, entomology, physiology, and bacteriology.

The chair of modern languages has been divided into two, one of Germanic languages to be filled by Professor B. F. Hoffman, and one of Romance languages to be filled by Dr. Raymond Weeks, of Kansas City. This means henceforth better work in modern languages.

Professor Waters, Dean of the College of Agriculture and director of the experiment station, will enter upon the duties of his office on September 1st. Mr. Waters is a Missourian and a graduate of the State University. Dr. Stedman, the new professor of entomology, reached Columbia on August 15th and went to work immediately. His laboratory occupies the whole second floor of the experiment station building. Dr. Stedman was recommended above all other candidates by the department of entomology at Washington.

A contract has been let to the Wrought Iron Range Co., of St. Louis, for refurnishing completely the kitchen of the Club House. The work is to be finished by the opening of the session on September 10th. The Club is filled chiefly by poor young men, and it is a matter of pride that the kitchen will be the best in Columbia, and one of the very best in the state.

The director of the Gymnasium and Professor of Physical Culture, Dr. G. W. Cutler, has been hard at work for the last month having the Gymnasium equipped and the athletic grounds prepared. Dr. Cutler, after spending some years in an excellent College, spent four years more in one of the best medical schools in the country. He has had considerable experience in gymnasium work and physical training. He will examine carefully every man that goes into the gymnasium and will prescribe such exercises as will develop weak muscles and remedy bodily defects. In no case will he allow weak or diseased students to engage in any exercise that could possibly injure them.

Last session the students made the best record that has ever been made in the University for hard study and good behavior. There was little or no occasion for discipline. With splendid crops the University is expecting the largest attendance that it has ever had, and there is no reason to doubt that the behavior will be as good as it was last year and the studying also.

Of the states next to Missouri—Kansas, Nebraska, Iowa, Illinois, Tennessee, Kentucky, Arkansas and the Indian Territory, not one has a State University that offers better facilities than the University of Missouri. An examination of the University will show the truth of this statement.

R. H. JESSE, President.

EDITORIAL.

SHALL WE AS PHYSICIANS "STAND BY" THE DRUGGISTS,
AND HOW?

The following clipping from the *Western Druggist*, of August, has been called to our notice. We have just had three very aggravating and discouraging cases of substitution in our personal practice and this furnishes a text for exposing the doings of some of the very virtuous gentleman who fill our prescriptions and meet us in joint society meetings with a plea for closer relations between doctor and druggist.

Here is the clipping: "Mr. E. A. Schubert, of Fostoria, Ohio, in the course of a paper on pharmacal ethics, relates this account of a practical test of the professional integrity and competency of retail druggists in a given section of his State—a section, by the way, probably the equal in professional intelligence and honesty of the average community in Ohio and other States. 'I espoused the thought,' remarked Mr. Schubert, 'that it would be a capital idea to write a prescription of easy composition and analysis, to see how many druggists would fill it correctly. I set to work immediately mailing to each of fifty physicians one of the prescriptions, at the same time asking him to write is as a prescription of his own, send some friend with it to his druggist to have it filled, a copy taken and returned to me with the compounded prescription. Out of the fifty requests sent out, I received thirty seven answers. The prescription called for a three-ounce preparation, but placing them side by side I found twenty-one to be three-ounce preparations, seven were in size four ounces, while the rest ranged in size from five to eight ounces. It was to be an emulsion; nineteen were of that composition, the remainder were far from being true to name. In color, when correctly filled, it would be nearly white; of these twenty-two were true in color, while the remainder ranged from a steel gray to nearly all the known hues. The principal active ingredient was the acetate of morphine; thirteen only contained this, the remainder principally contained the sulphate. *Out of the entire number returned, eleven were found to be filled correctly.* The remainder were base substitutions, either through ignorance or intention. Of the eleven that were correct, nine came from the hands of Ph. G's, the remaining two were compounded by old and reliable druggists in the city. Of the twenty-six not properly filled we found five Ph. G's., the remainder were country druggists having very little experience in this line and located, with but few exceptions, in towns of 6,000 inhabitants and less.' Can it be possible that this sort of recklessness and ignorance characterizes the profession in other intelligent communities?—*Western Druggist*, August, 1895."

Only eleven out of thirty-seven correctly filled. "The remainder were *base substitutions* either through ignorance or intention" and this from the gentlemen who in our own practice we entrust with our business and our reputations and allow our patients to foot the bill.

The following three cases have occurred in the editor's practice in the last sixty days. Undoubtedly the same can be duplicated in the practice of any other physician in the city.

I. "In Colorado Springs, August 16th, 1895, I desired a small amount of 'Maltine with Cod-liver Oil' for use in case of my baby girl, who was recovering from an acute bronchitis. Owing to the inconvenience of carrying

in our satchel the large bottle, my wife suggested that I get three ounces at this time, and more as needed. I wrote my own prescription for it, and the druggist put up a black, bitter extract, totally unfit for any child's use, which I insisted was not maltine and which he as strenuously insisted *was*. I declined to take it, purchased an unbroken package and received what I wished.

II. In Kansas City, Mo., September 3rd, I stopped at the store of a druggist who has an excellent standing and whom I believe to be in his word and dealing *honest* as he construes the term. I asked for a few ounces of bromidia for use in my practice telling him I had a sleepless patient and should administer the medicine myself. He took from the shelf a bottle bearing the label of Battle & Co., of St. Louis, and containing only an ounce or two of liquid and said, "Here doctor, is all I have, I will let you have this and *will make some more at once*!" "Make it!" I exclaimed. "Why yes," he answered "here is the formula for bromidia," and he turned to a formula in a printed and bound book and showed me, the "formula" (so-called) not alone of bromidia, but also of numbers of other proprietary remedies whose owners had spent thousands of dollars in creating a demand for the article named and guarded with a care unknown to any druggist the purity and standard quality of the drugs entering into their composition, and according to that formula, the correctness of which he could only assume he was *making* the proprietaries from which he was daily filling prescriptions, *and he wasn't ashamed to say so*. That's why I call him "honest, as he construes the term." It seems to be honest business among the druggists or why the sale of the formula books? I took an ounce for future reference and purchased chloral (which I sincerely hoped he hadn't "made" from the rock salt barrel) and went my way, thankful that my case contained tablet triturates which I could use for the time.

III. Being for some days in a distant locality among the mountains, I ordered August 5, 1895, by mail an ounce of antikamnia tablets (5 gr.) from a druggist whom I have known intimately for seven years and whom, were his name mentioned, every physician of long practice in Kansas City would recommend as a safe compounder.

The tablets sent were not antikamnia. They were an excellent combination of acetanilid, etc., doing good work, but *not* antikamnia nor anything as satisfactory in action. I have the tablets, some of them, in my possession, and also the box labeled, "antikamnia, 5 gr. tabs," bearing the druggist's name.

None of these samples, given in an ordinary business transaction, will be used to disturb, or punish the gentleman giving them. We are not in the detective business. The manufacturers may or may not choose to protect themselves. They can easily do so if they wish. We shall keep our samples for reasons of our own. We are seeking to protect ourselves as doctors and thus our patients. We have had a similar trouble with Phillip's phospho-muriate of quinine comp., receiving a poorly made compound of the druggist's manufacture. We have had a similar experience in attempting to obtain Lilly's yerbazine and we are tired of it. Why does the druggist put his stuff in one of Battle & Co.'s bottles if he wishes to sell his own manufacture? Why does he label the box antikamnia if he wishes to sell his own com-

bination? The answer is plain; cheaper—more clear profit, based on the reputation of the imitated article. This is simply dishonesty and nothing better. Indeed, we must and should “stand by our druggists” and stand by them with a sharp stick, as the old ladies say, and see to it that our patients get what our written order calls for.

THE KANSAS CITY POLYCLINIC-POSTGRADUATE MEDICAL SCHOOL.

The project to found a post-graduate school in Kansas City for graduates in medicine once undertaken and allowed to fail, has again been revived and placed upon a sound business footing. The charter now rests with the new promoters and details are being rapidly arranged. H. C. Crowell, M. D., is president, J. Block, M. D., treasurer, and G. W. Grove, M. D., secretary. About 20 names have been secured toward the faculty. All lectures are to be clinical. Every professor must attend to his clinic in person; no substitutes will be allowed. The sessions will be continued the entire year, and will commence whenever arrangements are complete. This will give to Kansas City a valuable addition to her educational facilities. It is expected that many strong men and good teachers will join the school from each of the medical colleges and that the post-graduate courses will be given up by the colleges, all combining to make the new venture a success.

THE KANSAS CITY MEDICAL COLLEGE.

The new building of this excellent school is about completed; a full force is pushing the work and lectures are in full operation in the old building and rented rooms. It is probable that a part of October will be needed to complete the new wing and then the school will be most excellently equipped. Few western schools stand higher than this one and its faculty insist that its classes shall be of good material be they ever so small. There will probably be a considerable increase in the total attendance over that of last year, as the enrollment up to date is larger than at this time in 1894. It gives us pleasure to note the continued advancement of this school.

DEATH OF LOUIS PASTEUR.

Professor Louis Pasteur, scientist, chemist, the father of bacteriology and the originator of the Pasteur treatment for hydrophobia, is dead. For two years he has suffered from paralysis and on Sept. 27th he fell a victim to the disease. The death occurred in Paris and the funeral was a national one. Thus passes away another great man.

EDITORIAL NOTES.

THE DIGESTION OF STARCHES.—“As is well-known, the food-stuffs taken by human beings can be divided into those which we call proteids, carbohydrates or starches, and fats. Each of these divisions is necessary for the maintenance of perfect nutrition, and just as soon as, from one cause or another, a person excludes one of these classes

from his diet, he begins to suffer from nutritive changes, which become more severe as the deprivation is persisted in.

Recognizing the fact that indigestion can often be relieved by the administration of animal digestive ferments, we have had introduced into medicine within the last few years pepsin and pancreatin for the purpose of aiding in the digestion of proteid substances. While, theoretically, extracts of pancreas ought to be equally efficacious in the digestion of proteids, starches and fats, the clinical fact remains that the last two important classes of food-stuffs are little influenced by it. As a result, while we are able to deal satisfactorily with those forms of dyspepsia depending upon gastric disorder, we can do little in the intestinal forms of dyspepsia, which arise largely from indigestion of the starches. It is true that in many instances deficient insalivation is the prime cause in cases of so-called starch dyspepsia, but there are other instances in which it is evident that the diastatic or starch-converting activity of the duodenal juices is at fault. In some instances the physician has attempted to supplant the ingestion of starches, and so to put fat upon his patient by the use of cod-liver oil, but as a rule, the administration of this nutritious substance only increases the intestinal disorder.

Diastatic power is an indefinite term applied to any ferment which is capable of converting starch into grape-sugar or glucose, and physiologists have recognized for many years that this power must be present for the proper digestion of starches.

In the *Therapeutic Gazette* for November 15, 1892, we urged the importance of discovering some substance possessing diastatic properties which could be administered in concentrative form to persons suffering from indigestion of the starches, and since that time we have continued to urge this need upon those best qualified to prepare such an active digestive substance.

The profession have tried to aid the digestion of starch for many years by the use of various preparations of malt, which have been largely given with little direct good as a result, for the diastatic properties of most of these preparations are so slight as to render them practically of no value as digestants, whatever may be their usefulness when acting as nutritives. Within the last few months a Japanese investigator has obtained such a valuable diastatic product that his researches deserve careful study and his results thorough trial. If, as he has apparently proved, we possess in taka-diastase a starch digestant equal to or exceeding in power pepsin or pancreatin for proteids, we have made an extraordinary gain in therapeutics, for we are now able to relieve a large number of persons suffering from faulty digestion of starch, and can aid our patients during convalescence, so that they speedily regain their weight and strength by the ingestion of large quantities of the heretofore indigestible, but nevertheless very necessary, starchy foods.

We trust that the readers of the *Gazette* will at once give this interesting ferment, which is capable of converting over one hundred times its own weight of starch, a thorough clinical trial, administering it in the dose of from 1 to 5 grains, which is best given in powder, or, if the patient objects to the powder, in capsule. We also trust that those who employ this digestant will, as soon as they obtain definite results, communicate them to the original columns of the *Gazette* for the benefit of our readers."—*Therapeutic Gazette*.

SOME SURGICAL SUGGESTIONS FROM THE NEW YORK RECORD.—*Symphysiotomy* is indicated in flat pelves with a conjugate of from 67 to 88 mm.; in funnel-shaped pelves with a transverse diameter of pelvic outlet of 88 mm., or less in cases of dystocia caused by tumors of the pelvic cavity; in cases of abnormal size of the fetus, but with normal pelvis. It is easily performed—*Winterberg*.

Ganglion.—Inject five to ten drops of tincture of iodine and bandage.—*Duplay*.

Use Black Pins in surgical dressings, since they will not rust and can be more readily seen.—*Medical Age*.

Iliac Abscess.—The indications for operation are: 1. Where the abscess is large

and making pressure upon important organs; 2. Where the abscess is increasing rapidly in size; 3. Where there is danger of rupture of the abscess into the peritoneal cavity.—*Young*.

Iliac abscess may not be of spinal origin, but arise from hip disease, perforating the acetabulum, innominate disease, etc. Sarcoma also occurs in this region.—*Willard*.

Empyema.—The indiscriminate use of antiseptic injections cannot be too strongly condemned, since many fatal results have immediately followed its practice. Immediate washing out of the pleural cavity after operation, for ordinary empyema, is always an inadvisable and hazardous procedure, and is only permissible at later periods when practised with the greatest caution.—*White*.

Stricture of the Urethra is most safely healed by gradual dilatation repeated every third day. In continuous dilatation a filiform bougie can remain three days, after which other instruments can be used.—*Horwitz*.

Varicose Ulcers.—Cleanse with sodium bicarbonate, apply methyl-violet solution, cover with absorbent cotton, and give even support to the tissues by bandage.—*Summers*.

Bed Sores.—Early application of strong nitrate of silver solution.

Sterilizing the Rhyperdermic is apt to spoil the leather packing.—[Therefore keep it clean and aseptic.—*Ed.*]

Carbolic Acid should be applied very sparingly to open wounds, especially in young and old subjects.

Fistula in Ano.—After the spincter is thoroughly stretched, the rectum is washed out carefully with a bichloride solution 1 to 4,000; the fistula is split open. Then the indurated tissue is thoroughly removed, taking care to cut out clean both ends of the fistula, not leaving any unhealthy skin or mucous membrane at these points. Search for branch channels, treat them in the same way, and finally close the wound with catgut, using only a single row of suture.—*Cook*.

Chancroid beneath the Prepuce.—Wash out with boric solution, inject beneath the foreskin a saturated solution of chloride of zinc, after about a minute wash again with boric acid and perform immediate circumcision.—*Cordier*.

Watch the Respiration in chloroform anæsthesia. If this keeps good the heart is not apt to give trouble.

A CASE OF PETROLEUM POISONING.—Cheves Bevill, M. D., of Winfield, Ark., writing in the *Therapeutic Gazette* reports the following case of coal oil poisoning which is of interest from the frequency of the accident and from the excellent and clear report of the observer: "At 5 p. m. on June 24th, I was called to see a child of two and a half years of age, who had a short time before drunk some coal oil. The patient was heavy, and it was difficult to get her to notice anything. From a condition of semi-consciousness she rapidly passed into one of stupor. On inquiry, I found that she had taken the oil about an hour and a half before, and at the suggestion of a neighbor had received one teaspoonful of common soda. At this time the child could be aroused, but when left alone would soon drop asleep, as if she had taken too much opium. The eyes were closed most of the time, even when she was aroused. The pupils were somewhat contracted and there was nystagmus. The extremities were cold; pulse, 135 and very weak; respirations, 35 to 40. The temperature was 97° F., and the breath was heavily laden with the odor of the oil. Powdered ipecac was given as an emetic freely, but as it failed to produce an effect, $\frac{1}{16}$ grain of apomorphine was given by the mouth. Eight minutes later the child vomited freely, a large quantity of food being ejected, with which was a mixed quantity of oil. Soon after this the child vomited a second time, getting rid of a good deal of oil; heat was applied to the feet, alcohol was administered internally. Four hours after the oil had been taken the pulse was 150, respirations 40, and six hours after the bowels were freely moved. Alcohol and coffee were continued during the night. Seven hours after the poison had been taken the pulse was 170, respira-

tions, 60, temperature being still subnormal, purging was frequent, and each movement contained oil. The next day slippery elm was given to allay irritation of the stomach after the poison was taken. In about three hours the child began to look about; but on attempting to eat, found swallowing so difficult that she could not take food. After this the child again became drowsy, the pupils became widely dilated, the eyes were drawn to one side, and there was much photophobia. The throat was exceedingly red and scalded looking; twenty-four hours after the poison had been taken she could walk with difficulty, the pulse being 120, the respirations 30, and the temperature 99° F. There was slight suppression of urine, for which I administered digitalis and a decoction of cactus, which speedily produced a free flow of urine; the urine was albuminous.

I believe that cases of coal-oil poisoning are quite rare, at least they are not commonly reported; but two cases, so far as I have been able to observe, have been reported during the last ten years in the *Therapeutic Gazette*, and an examination of the other journals to which I have had access fails to reveal reports of any such cases. The national Dispensatory speaks of a patient who died on the twentieth day after being poisoned with petroleum, the cause of death being gastro-enteritis. In his book on therapeutics, H. C. Wood says nothing of such poisoning.

According to Pellew in "Hamilton's System of Legal Medicine," the total number of cases of petroleum-poisoning amounts to two thousand three hundred and eighty.

TREATMENT OF STYES; OPERATIVE AND PREVENTIVE.—The *New York Medical Journal* gives the following from the *Gazette Medicale de Paris* as a satisfactory treatment for that troublesome affection of the eye-lids known as styes. Hot antiseptic poultices should be applied on first appearance of swelling (flax seed poultice \bar{z} viij; acid carbolie, M. xl. Mix, apply hot.—Ed.) After the pus has formed an incision is made and slight digital pressure is employed to aid in the expulsion of the core; hot compresses accomplish the rest. In order to prevent a return of the symptoms an antiseptic ointment consisting of seventy-five grains of vaseline and three quarters of a grain of yellow mercury oxide should be applied to the eye-lids every night, and both morning and evening the eye should be bathed with a warm solution of boric acid in water, or of corrosive sublimate, without alcohol, in the proportion of a grain and a half to fifteen ounces and a half of water.

The preventive treatment is based on the etiological diagnosis. The conjunctiva, the lachrymal ducts, and derangements of refraction are treated; the patient is instructed to take special precautions, (using green protectors, avoiding scratching the eyes, etc.) when his work exposes him to any irritating action; above all, if he is subject to inflammation of the eye-lids. The general condition should never be neglected. If there is a furuncular diathesis alkaline preparations should be employed, such as sodium arseniate or bicarbonate and tar water; if the patient is of a lymphatic temperament tonics and iodized preparations should be employed, and, finally, at times an antidiabetic diet may be useful. The treatment should then be not only curative but above all preventative, and should be local and general.

THE GREAT INTERNATIONAL YACHT RACE.—We suppose it is necessary to devote some space to the consideration of the great race between the American yacht "Defender," and the British yacht "Valkyrie III" for the possession of America's Cup. We have never had a sporting editor and are loth to hire one for the occasion. The tilts and bouts that have been "brought off" on the brusselsed carpeted arena of the Jackson County Society rooms, have never been reported by any one but the editor himself, and we can do that sort of thing when necessary but our nautical education has never been pushed to that polish and finish necessary to make an interesting commentary on the great sailing event. So then, believing it better to clip from those exchanges more capable of pronouncing upon such things than to write upon topics we know not of,

we append the following with due credit to the New York *Sun* which originally produced it and to the Kansas City *Star* from whose columns it has been amputated.

The eagle and lion set out for a race
And jockeyed for lead with an airy grace;
"Now come!" said the bird: "I'll set you a pace!"
"Go long!" quoth the lion: "I'll push your face!"

Then the eagle screamed
And the lion growled
And the blue jay beamed
And the black bird scowled;
And the whole menagerie
Hooted and howled!

Said the lion to himself: "The saucy thing!"
And he flitted his tail with coquettish fling.
Which he didn't intend should hurt or sting.
But it did, for it crippled the eagle's wing.

Then the eagle screeched
And the lion pawed
And the blue jay preached
And the old crow cawed;
And the whole menagerie
Jeered and jawed!

"Great Scott!" shrieked the bird, "now what'll I do?
My starboard flipper's gone up the flue!
I've only one wing where I should have two,
And how in Sam Hill can I race with you?"

Then the eagle limped,
And the lion roared,
And the blue jay whimped,
And the old crow soared;
And the whole menagerie
Got on board!

Then the churlish lion said never a word,
But started to race with a one-winged bird;
And his soul was not for an instant stirred
By the love of fair play of which we've heard!

Then the eagle swore,
And the lion chewed,
And the blue jay tore,
And the old crow stewed;
And the whole menagerie
Boo-hoo-hooed!

Then the bird got hot and hissed through his bill,
"By Jing! I'll go it with one, I will!
'Twill never be said I'm licked until
I'm down to my dead last, got durned quill!"

Then the eagle humped,
And the lion laughed,
And the blue jay jumped
On the old crow's gaff;
And the whole menagerie
Went clean daff.

Well, the lion won by the length of his toe—
(A mighty small win as such things go!)
But his soul was bowed with a weight of woe,
For he knew he'd won from a one-winged foe.

Then the eagle flew,
And the lion fled,
And the blue jay blew
Till the crow blushed red;
And the whole menagerie
Went off to bed.

CHLORAL.—Chloral is usually considered to be essentially a hypnotic and sedative drug. It has, however, quite a number of other uses. In this city it has long been employed, in small doses, as a vaso-dilator, two or three grains being given, combined perhaps with iodide of potassium. Associated with this same drug, Dr. Pal finds it of service in bronchial asthma, and the same physician has found it effective also, in doses of from 10 to 20 grains, in checking bleeding from the lungs. On the same principle, that is, on the principle of its acting as a relaxer of arterial tension, Dr. Cherchevsky has used it in small doses daily to counteract coldness of the feet and hands, which are so disagreeable symptoms in some cases of anæmia and neurasthenia. Dr. Pal has also recommended chloral hydrate as a laxative in various forms of chronic constipation, principally those of neuropathic patients. The dose here, however, is more than 20 grains, and as the *Practitioner* truly says, the drug must be a dangerous one to use for such a purpose.

M. Spehn recommends chloral very highly as a local application for boils. He directs that the boil be kept covered with a tampon of cotton well soaked in a solution of chloral hydrate, glycerine and water. The strength of the solution is about two drachms to the ounce.

A writer in the *Semaine Médicale* recommends chloral for children who are irritable and restless when suffering from scarlet fever. Another use of chloral is in certain forms of dyspepsia in which there is a sense of distension with pain in the neighborhood of the cardiac end of the stomach. This dyspepsia usually occurs in neurotic persons and may be termed a nervous type of the disorder. According to the *Therapeutic Gazette*, a little chloral hydrate (one or two grains) dissolved in peppermint water is of service here.

Chloral is recommended by Playfair in his text-book, for dilating the rigid cervix, during the early stages of labor.

We are somewhat loathe to give chloral any more prestige than it already has. Still we should add that it is a drug which has been shown to be of some service in epilepsy, and which is one of the sheet-anchors in acute alcoholism; but it is also a drug whose continued use, even in rather moderate doses, is sure to injure the patient eventually. Chloral needs always to be given cautiously at first, and never for prolonged periods of time.—*N. Y. Medical Record*.

PATIENCE AND ENDURANCE OF THE HUMAN STOMACH.—Dr. Mayo Rolson, surgeon to the General Infirmary of Leeds, reports the following queer case to the London *Lancet*. A little girl of the age of ten years was brought to Dr. Collier, suffering from general debility and nausea, accompanied by frequent attacks of vomiting. The latter symptoms had only existed during the previous twenty-four hours, and were most persistent as well as distressing and refused to yield to ordinary treatment. The child suffered more or less additional pains in the abdomen. Five weeks after her first examination she vomited up a nail. This was the first clue the physicians received as to the probable cause of the illness, as she had given no history or possible cause for her condition, and on this the child admitted having swallowed six similar nails. Gastrotomy was then performed for the little sufferer's relief, and the following articles were extracted from the stomach: 42 iron nails of an inch and a half in length; 93 tacks of brass and of white metal; 12 larger nails, some with rubber heads; three shirt-buttons; one safety-pin, and a sewing-machine needle. Some of these articles had been swallowed eight months before the date of the operation. This shows the resistance of the stomach and its little liability to injury from internal sources. When the child's age is considered, and that she made a rapid recovery, the case is remarkable.—*Nat. Pop. Review*.

A DOCTOR SUED FOR DAMAGES.—The following appeared in the *Kansas City Journal*, of September 22nd. "An odd sort of suit has been commenced in the district court at Newton, wherein Dr. J. T. Axtell superintendent of the local hospital, has

been sued by W. N. Gee, for \$2,000 damages. Some years ago Mrs. Gee, wife of the plaintiff, was an inmate of Dr. Axtell's hospital, and one night while in delirium she escaped from the building and in some manner got in front of a Santa Fe switch engine, which cut off one of her hands at the wrist. Later Mrs. Gee was sent to the insane asylum, and doubtless was mentally unbalanced at the time the accident happened. Mr. Gee alleges in his cause of action that the escape of Mrs. Gee from the hospital was due to the carelessness of Dr. Axtell or his assistants."

The editor of the INDEX is personally acquainted with Dr. Axtell and feels confident that the escape of Mrs. Gee was not due to Dr. Axtell's carelessness, for Dr. Axtell is not careless. His reputation earned by many years of faithful service is enough to convince us that there is something else to be heard in the matter, and we trust Dr. Axtell will let us hear it. Meanwhile let no one interfere with the great American free privilege accorded to every one man to drag a doctor into court and cause him all the expense and trouble possible without having to have a shadow of cause for it. It makes money for the lawyers, you know.

A SEDATIVE COUGH MIXTURE IN PHTHISIS.—

Codeinæ sulph.	-	-	-	gr. iij.
Liq. atropiæ sulph.	-	-	-	m xij
Liq. strychniæ	-	-	-	j
Syr. tolutani	.	.	.	iss
Infus. rosa acid.	-	-	-	vj

M. A tablespoonful in a wineglassful of water every four or six hours.—*Med. Press and Circular.*

BOOK TALK.

LITERARY NOTES.

Lea Bros. & Co., 710 Sansom St., Philadelphia, announce a new book as ready for distribution, i. e., "Disorders of the Sexual Organs in the Male," by Eugene Fuller, M. D., Instructor in Venereal and Genito-urinary Diseases, New York Post-Graduate Medical School. In one very handsome octavo volume of 238 pages with 25 engravings and 8 full page plates. Cloth, \$2.00.

They say of the book: "Extensive experience in private practice and in one of the leading New York medical schools has convinced the author that male sexual disorders arise more frequently from pathological states of the organs themselves than from neurological or mental causes. He has endeavored in this work to place the literature of sexual pathology abreast of that on sexual neurology and to furnish the profession with a guide to diagnosis and treatment in which all the etiological factors are considered according to their relative importance. The rich rewards obtained by irregular practitioners practising in this branch of medicine may be considered in a certain sense as an expression of public opinion upon the comparative success of the regular practitioner. Rational methods must rescue this most important class of disease from the empirics, and a work pointing the way to successful treatment founded upon sound pathology and diagnosis will benefit the profession almost as much as their patients."

We have not yet had an opportunity of examining the work but the reputation of author and publisher is such as to warrant a favorable advance opinion.

They also announce a new (8th) edition of "Green's Pathology" as follows: "Just ready. Pathology and Morbid Anatomy." By T. Henry Green, M. D., Lecturer on pathology and morbid anatomy at Charing-Cross Hospital Medical School, London. Seventh American from the eighth and revised English edition. Octavo volume of 595 pages, with 224 engravings, and a colored plate. Cloth \$2.75.

Green's Pathology and Morbid Anatomy has long been unquestionably the leading work on its subjects in all English-speaking countries, a fact attested by the demand

for seven American and eight English editions. A knowledge of the natural history of disease is an essential to graduation, and not less important to the practitioner, as it is a prerequisite to rational and successful measures towards cure. The present issue has been thoroughly revised to represent the latest knowledge, new chapters being added, and every page bearing evidence of change. The notable list of illustrations has been enriched by the addition of sixty new engravings and a colored plate.

The publishers of Littell's *Living Age* have abundant faith in their publication and take a just and pardonable pride in announcing its excellence. This is really one of the oldest and highest class magazines in America and the facts justify the claims of Messrs. Littell & Co.

In a communication recently received they say: "It is no empty boast on the part of Littell's *Living Age* that while it is the oldest high-class literary publication in the country, it also stands at the head in regard to the quantity of the matter given its readers yearly, and in the uniformly high character of its contents.

It is a magazine in fact which no reader who desires to know what is passing in the world of letters can afford to do without."

A glance at the following partial table of contents of the August numbers will easily bear out this statement. The range of subjects embraced in one month's issues is remarkable. "Recent Science," by Prince Kropotkin; "The Letters of Coleridge," by Andrew Lang; "The Grave of the Druids," by Harrison Barker; "Unconquered Mithras," by Thomas H. B. Graham; "Glimpses of Some Vanished Celebrities," by F. M. F. Skene; "A Drive from Paris to Nice," by E. Johnson; "Color Music," by Wm. Schooling; "Intellectual Detachment," by Sir Herbert Maxwell; "England and France in the Nile Valley," by Captain F. D. Lugard; "Mr. Wm. Watson's Serious Verse," by Laurie Magnus; "Formosa, by a Native of that Island," by Harry Jones; "Labrador," "Our Last War with the Mahsuds," by S. S. Thorburn; "Ireland Revisited," by Lord Houghton; "Lord Camelford," by Charles Bruce-Angier; "Robert Burns," "Old Italian Gardens," by Vernon Lee; "My Native Salmon River," by Archibald Forbes; "Religious Movements in India," by Banda Khuda; "Cranford Souvenirs," by Beatrix L. Tollemache; "Mental Work," from the French, by Guillaume Ferrero.

Besides the above are many other papers of great merit and value, with several capital short stories and poetry. Published weekly at \$8.00 a year, by Littell & Co., Boston, Mass.

LITTLE ITEMS.

The Neosho Medical Society will organize October 16th at Erie, Kansas.

Dr. L. G. Taylor has removed his office and residence to 720 Woodland avenue.

Please note the change of address of the INDEX and its editor to 1018 East 15th Street.

The Lawrence Kansas schools were closed Sept. 23rd on account of diphtheria. This disease is also prevalent in Topeka, Kansas.

Dr. E. Lanphear is sojourning at the Chicago Post-Graduate Medical School awhile. He says "Senn's surgical clinic is the largest in the world."

Read the Medical Society Calendar. If your society is not represented or is represented wrongly, write to the INDEX and correction will be made.

Drs. Geo. Halley and Chas. Wilson have removed to the New Ridge Building. The private hospital at 800 Lydia Avenue has been discontinued.

Boston has a new city Hospital costing \$500,000.00 and accommodating 800 patients. It is said to be the largest and most perfect hospital built in this country.

Dr. Herman E. Pearse has removed his office and residence to 1018 East 15th St.

Dr. B. L. Eastman, of Burlington, Kas., was a pleasant caller at the INDEX office September 24. The doctor will go abroad, spending six months in London and afterward visit the principal hospitals of the continent. He has promised us an occasional letter.

The Kansas City Training School for Nurses has four Hospital appointments to be filled. The applicant must be above 23 years of age, of good moral character and possessed of aptitude, and a good common school education. Address the president, Dr. C. A. Dannaker, 205 East 12th Street.

The American Public Health Association at its meeting in Denver, October 1st, 2nd, 3rd and 4th, received the reports of special committees upon topics of interest and importance. Among the names composing these special committees we notice Dr. J. D. Griffith on "Transportation of the Dead," and Dr. E. R. Lewis on "Car Sanitation."

Dr. F. Byron Robinson has promised us an article on "The Ligaments of the Liver." We also hold a written promise from the eminent Dr. Wyeth to contribute to the good things of the INDEX while yet 1895 is with us. We have chosen his subject, "The Removal of Surface Epitheliomata by Caustics," but he has not yet promised to write upon this topic.

Dr. M. E. Lake, of Erie, Kansas, was at St. Joseph's hospital last week, accompanying Dr. Steinberger's son, who came here for consultation concerning his leg. He had been an active athlete and had injured his leg several months ago below the knee, but not sufficiently to cause apprehension; in fact it was not noticed at the time. However, a sarcoma rapidly developed and amputation was necessary. Dr. J. D. Griffith, assisted by Drs. Binnie and Haroldson, operated Sept. 15th, removing the leg at the knee. On last Thanksgiving day the young man was a most noticeable player at the foot-ball game, in the course of which it is said he received the injury which resulted in the operation. The rapid growth and size attained by the tumor were quite remarkable. He is recovering at present.

READING NOTICES.

In prescribing the products of manufacturing pharmacists, we should be guided to a great extent by the business standing of the manufacturers. No other house in the South or West has a better reputation for strict integrity than the Robinson-Pettet Company, Louisville, Ky. We do not hesitate to recommend the preparations advertised by them on page 10, this issue.

CHRONIC CYSTITIS WITH STRICTURE.—My experience with Sanmetto is quite extensive. I could give special cases in which its action was simply astonishing, but in this report I wish to summarize my experience by saying I have given Sanmetto a long and thorough trial in a case of chronic cystitis, accompanied with stricture, the result of which warrants me in saying Sanmetto is unsurpassed by any other preparation with which I am acquainted. Its effects are prompt and positive.

Buffalo, N. Y.

RACHAEL J. KEMBALL, M. D.

PRE-SENILITY—OVARIAN PAINS—CHRONIC ENDOMETRITIS.—I have been using Sanmetto for the past two years, with surprisingly good success. As a remedy for declining virility there is no equal, in fact it is a *sine qua non*. Have also given it with success in ovarian pains, and in that troublesome and painful condition due to chronic endometritis. Sanmetto is an important addition to our therapeutical means. Its beneficial effects are simply marvelous.

J. D. BENNETT, M. D.

Crystal River, Fla.

ANÆMIC PATIENTS WHO HAVE MALARIAL CACHEXIA.—Dr. T. D. Crothers, editor of *The Quarterly Journal of Inebriety*, published under the auspices of the American Association for the study and cure of Inebriates and who is an authority on neuroses, writes in his last number as follows: Antikamnia and quinine are put up in tablet form, each tablet containing two and one-half grains of antikamnia, and two and one-half grains of quinine, and is the most satisfactory mode of exhibition. This combination is especially valuable in headache (hemicrania), and the neuralgias occurring in anæmic patients who have malarial cachexia, and in a large number of affections more or less dependent upon this cachectic condition.

KANSAS CITY MEDICAL INDEX.

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ORIGINAL ARTICLES.

THE LIGAMENTS OF THE LIVER.

BYRON ROBINSON, CHICAGO, ILLS.

Professor of Gynæcology in the Chicago Post-Graduate School.

I.—THE LONGITUDINAL LIGAMENT.

(*The broad, falciform or Suspensory Ligament, Ligamentum Suspensorium Hepatis*).

The longitudinal ligament of the liver is a very irregularly quadrilateral-shaped, double-bladed fold of peritoneum. It may at times be said to be half-moon-shaped or at certain periods of life it may be almost triangular. In one case of actual measurement, it measured on its anterior border 7 inches long, 3 inches at its base (round ligament) and 1 inch at the upper end joining the diaphragm, and 5 inches on its exterior border. In another case the base measured 5 inches (round ligament to notch on anterior border of liver), the anterior border was 8 inches and the exterior border 5 inches. In this case the upper end was pointed and the lower end no border. These measurements show the wide variation of individual cases. Its shape varies with age, size and condition of the liver, and with other viscera. It extends from the navel to the diaphragm. It does not serve to support the liver, but is a relic of development, and assumes a folded shape. It is seldom, if ever, on a stretch. It has four borders, one of which is free—that containing the remains of the umbilical vein. The anterior border is attached to the white or

middle line of the abdomen, from the navel to the diaphragm, and then continued on the under surface of the diaphragm to a point immediately to the right of the œsophagus. This anterior border is composed of two reflected layers of peritoneum, one of which passes to line the right and the other the left anterior surface of the abdomen below and the diaphragm above. The border has exactly the curved shape of the under surface of the abdomen and the diaphragm. The anterior border of one ligament connects the liver to the anterior abdominal wall and diaphragm. In some adult bodies it measured 8 inches. In between the plates of this anterior border the intercostal nerves and vessels may enter. The peritoneal folds at the anterior border acutely reflect themselves, cover the anterior abdominal wall and diaphragmatic surface. At the upper end of the anterior border the plates of peritoneum may be seen reflecting or merging into the coronary ligaments. The anterior border of the longitudinal ligament is not precisely perpendicular, but so far as my examinations are concerned, it is parallel with the mesenterium intestinum or musculus psoas dextra.

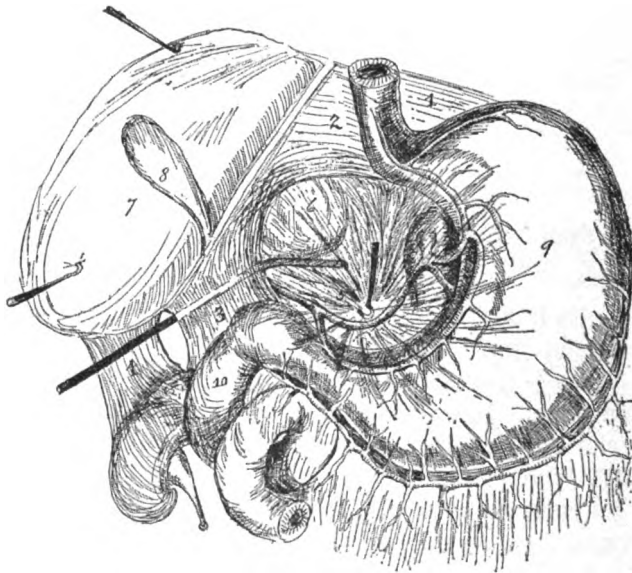


FIG 1.

Fig. 1 (after Byron Robinson) is an illustration of the ligamentum gastro-hepaticum (omentum minus) and the ligamentum hepato-renal. The lesser omentum is shown in three distinct parts, viz: 2—Pars Tendinea, (Robinson); 5 and 6—Pars Flaccida, (Toldt); 3—Pars hepato-duodenale. No. 4 illustrates well the peritoneal band reaching from the liver to the kidney (ligamentum hepato-renal). This drawing I sketched from nature out of a spare cadaver of about 55 years old. The stomach and liver are held apart by tension, in order to put the ligaments on a stretch. Note that the outer and greater inlet of Winslow's foramen begins at the right border of the hepato-renal ligament and its inner or smaller

mouth begins at the anterior border of the vena cava inferior, *i. e.*, the so-called Winslow's foramen has a larger outer mouth and a smaller inner mouth. The anterior circumference of the greater mouth is composed of the outer edge of the ligamentum hepato-colicum and the smaller mouth by the anterior edge of the ligamentum hepato-duodenale. The introduced sound, bent at its end, indicates the two mouths, however, in this case the ligamentum hepato-colicum is not sketched. No. 6 indicates Spigel's lobe of the liver shimmering through the pars flaccida which is gathered into a pucker by a hook. 8—Gall-bladder.

The border is oblique from left above to right below, *i. e.*, parallel to the *fisura transversus hepatis*. It may not be exactly straight. The anterior border of the longitudinal ligament is composed of two folds of peritoneum closely applied and rests against the muscle of the diaphragm and the fascia transversalis abdominalis. Between the folds of peritoneum composing the anterior border of this ligament may be seen considerable connective tissue, vessels and nerves. The lower end of the anterior border ends in a sharp point at the navel, the upper end ceases at the middle of the dome of the diaphragm by diverging and merging into the coronary ligaments. In an infant of a few months the anterior border measured 3 inches. The peritoneum along this border often appears whiter than the adjacent portion, owing to the white tissue of the *linea alba*. The inferior or free border of the longitudinal ligament of the liver extends from the umbilicus to the transverse fissure. The free fold of peritoneum apparently extends to the notch on the anterior border of the liver, but the vestigial umbilical vein passes on to the liver and the posterior border, where it empties into the vena cava inferior. The free border may enter a wide open notch on the anterior edge of the liver, or enter a real aperture in the liver substance (*pon hepatis*) or the notch may be closed merely by the approximation of its sides. The free border is round and smooth. It has a concave outline in general, but may occasionally be seen with a straight border. In an adult it measured 4 inches from the anterior border of the liver to the umbilicus. In an infant it measured 3 inches. However, its length varies in individual cases. In the natural state the inferior or free border generally lies against the anterior abdominal wall and the viscera slide to and fro over it. In some bodies the length of the free border is considerably shortened by the remnants of the umbilical vein being closely applied to the anterior abdominal wall for some distance from the umbilicus upward. In foetal life the notch on the anterior border of the liver comes exactly on a level with the umbilicus. The apparent elongation of the free border in adults of the longitudinal ligament lying between the umbilicus and anterior edge of the liver is due to atrophy of the liver.

The outline of the anterior border of the longitudinal ligament of the liver is not a precise curve, but in general it is concave,

posteriorly. In many bodies the round ligament and anterior border blends together against the posterior surface of the abdominal wall. The anterior border is turned toward the right.

Fig. 2 (after Byron Robinson) indicates the development of the ligaments of the liver by a horizontal sketch. It is a schematic drawing to show how the liver develops in the anterior mesogaster, 1 is the posterior mesogaster passing from the dorsal wall to embrace the stomach, 2, after the stomach is enveloped by the double-bladed posterior mesogaster, the blades again come in contact with the stomach, 2, and the liver, 3, are the part of the anterior mesogaster not yet widely separated by the growing liver; 5 shows the anterior division of the non-closed peritoneum. This aperture at 5 in the peritoneum will finally represent the division between the upper and lower coronary ligaments, *i. e.*, the portion of the liver uncovered by the peritoneum. In order to understand this view, one must conceive that the liver has enormously shrunk and rotated extensively to the right. Also that the process is much changed by the growing diaphragm. The point at 5 will, of course, represent the place where exists the ligamentum suspensorium hepatis containing the ligamentum teres hepatis (the atrophied remains of the vena umbilicalis). The liver in the fœtus originally reached to the umbilicus, where the umbilical vein reaches the navel. Afterward the liver rapidly atrophies, and the closed point of the anterior mesogaster is rotated upward and backward to the point where the liver is not covered by peritoneum in the adult, *i. e.*, between the upper and lower coronary ligaments, especially on the right side. Observe at first that the liver itself has a posterior mesogaster (No. 3, the lesser omentum) and an anterior mesogaster (No. 5, the suspensory ligament).

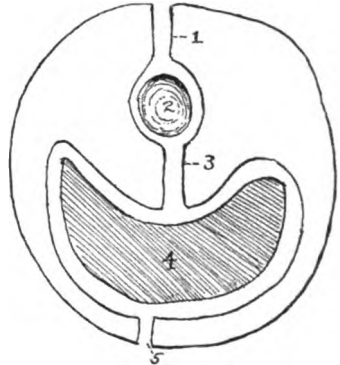


FIG. 2.

The posterior border of the longitudinal ligament of the liver extends from the diaphragm to the anterior edge of the liver or to the border of the round ligament. It is inserted on a line on the convex superior surface of the liver which divides the right from the left lobe. Each layer of the double-bladed membrane is reflected from the border to cover the surface of the liver on each side. The border is concave posteriorly and turned toward the right. The posterior border lies to the right of the median line, not only on account of the atrophy of the left lobe, but on account of the right-sided position of the liver. It extends from left above to right below, *i. e.*, obliquely across the abdomen.

The superior border of the longitudinal ligament is generally about an inch long. It extends from the diaphragm to the liver on its posterior margin. This border represents the double-bladed longitudinal ligament immediately before the blades diverge to become the coronary ligaments. The direction of the border is perpendicular to the vertebral column. In some bodies it may be almost a point, yet in an infant it measured nearly an inch long, and in an adult it

measured over an inch. The border of the ligament is easily felt in adults or infants by passing the index finger up to the diaphragm on either sides of the longitudinal ligament, over the superior liver surface. The most practical method is to make a transverse incision through the abdominal wall from one iliac crest to the other, just below the navel, and then make an incision on each side of the linea alba, two inches from the middle line through the abdominal walls from the first incision as far up as the border of the ribs. The longitudinal ligament can then be viewed easily from both sides throughout the whole extent. The ligamentum longitudinale hepatis consists of a double-bladed fold of peritoneum enclosing within it the round ligament connective tissue, vessels and nerves. It is an acquired serous fold brought about by the evolutionary changes through which the liver passes in intra-uterine and extra-uterine life.

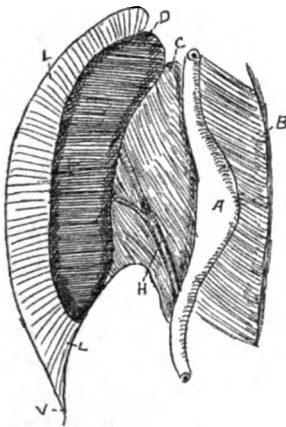


FIG. 3.

Fig. 3 (after Byron Robinson) is a schematic drawing to represent the gastro-hepatic omentum, with the suspensory ligament of the liver after the atrophy and the rotation of the liver to the right; we now look at the gastro-hepatic omentum from its left or anterior surface. A is the stomach; B the posterior mesogaster; (C) anterior mesogaster (gastro-hepatic omentum); D, liver; L, suspensory ligament of the liver; U, umbilicus; H, hepatic artery. It will be observed from the figures that vessels enter and pass from the liver at two points, viz.: (a) at the point where the gastro-hepatic omentum reaches the transverse fissure of the liver vessels, nerves and ducts pass to and from the liver; (b) at the point of the liver where it is uncovered by serous membrane, the vessels again pass to and from the liver as the vena cava. The peculiar embryologic and adult

condition of the liver accounts for its position in the anterior mesogaster or lesser omentum. The liver first budded out of the duodenum and its duct (the gall-duct) soon left the liver with a long, narrow style. Very early in the embryo the liver is enormously large, but quickly after birth it rapidly shrinks, and in so doing not only changes its position, but alters its peritoneal connection in such a manner that in adult life the uncovered portion of the liver looks backward to the diaphragm. Concerning the peritoneal covering of the liver beyond the transverse fissure we have, at present, nothing further to say, though the ligamentum suspensorium hepatis was originally a part of the anterior mesogaster. As the liver atrophies it drags the pylorus with it, producing the apparent horizontal condition of the stomach.

Since it is a fold acquired by development it does not possess a mesenterii membrana propria as the small intestines do. However, the blades of the fold are quite firmly held together by white connective tissue. The fold is transparent, but can be easily felt between the finger and thumb. Its two serous folds are, so far as I can estimate, a little thicker than general parietal peritoneum, and consid-

erable thicker than visceral peritoneum. It is no doubt thickened by friction and dragging. On opening a cadaver the longitudinale ligament of the liver assumes a varied folded appearance. The middle of its folds generally rests more or less on the left liver lobe. Yet it must constantly change in position by respiration, the emptying and filling of the stomach, attitude of the body and the size and condition of the abdominal viscera. As the liver descends or prolapses the ligament must elongate. As the liver enlarges its posterior border must lengthen. In the natural adult condition if one introduces the hand from the left side a pocket-like fold can be felt in the ligament, owing to the posterior border of the ligament being drawn to the right of the middle line. The blood supply is chiefly to the ligament from the hepatic artery also from the diaphragmatic, internal mammary and intercostals. The nerve supply comes from the (spinal) intercostals and the sympathetics are carried to the ligament over arteries—hepatic, diaphragmatic, mammary and intercostals. If one holds the longitudinal ligament of the liver between the light and the eye he will observe a variation of lighter and darker spaces in the structure owing to a variation in thickness and density. All peritoneal folds vary in a similar way. However, I never observed fenestrated apertures from atrophy in the longitudinal ligament of the liver similar to those found in the greater and lesser omentum. In glancing over some fifty anatomies in our library, written during the last four-score years, little can be found in regard to this so-called sagittal peritoneal duplicature. No reference in literature has been found as to the rupture of the ligament and consequent entrance and strangulation of any viscus. The ligament in general lies in a folded state between the liver and the diaphragm and anterior abdominal wall. Seldom have I, during two hundred autopsies, found distinct peritonitis on its surface; but, if peritonitis exist, it is generally on the right superior surface of the right lobe. The longitudinal ligament is greater in proportion, in the adult than in the child, for the liver is larger relatively in the child than in the adult, and hence as the liver atrophies the ligament proportionately increases, for the points of insertion do not change except to increase in outline. It may be observed in general that the longitudinal ligament has a course from left above to right below to the anterior border of the liver, but from the anterior border of the liver to the navel the ligament presents a course or direction exactly opposite to the upper portion, the ligament forms a large obtuse angle on the left side at the anterior border of the liver, which is well illustrated in the figure. In man, and especially the dog (carnivora), also the herbivora and solipeds an accumulation of fat may be found along the lower end of the longitudinal ligament. The fat collects more particularly along the lower anterior border and but slightly along the base or round

ligament. In dogs, however, it is a pretty good symptom of old age to possess a large accumulation of fat around the lower end of the suspensory ligament. In the condition of closed abdomen the suspensory ligament forms a kind of peritoneal recess on the left side which receives the left liver lobe, while the right blade of the suspensory ligament rests in contact with the diaphragm. As one holds up an ordinary suspensory ligament it will be noticed that large numbers of white connective tissue fibres pass in a parallel direction from the linea alba, the anterior border, to the posterior border.

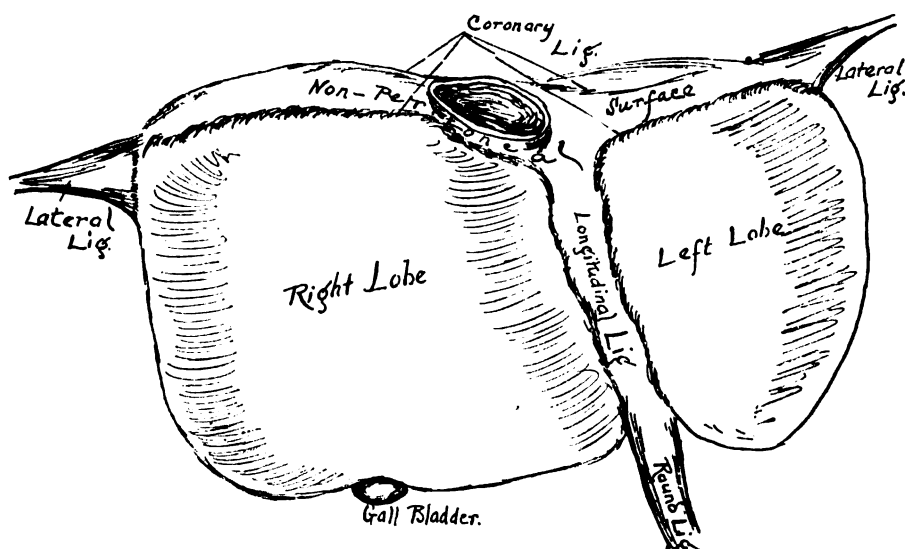


FIG. 4.

Fig. 4 (after Byron Robinson) shows the insertions of the hepatic ligaments. It denotes the outlines where the peritoneum leaves the liver uncovered. It presents the upper surface of the organs.

II.—THE ROUND LIGAMENT OF THE LIVER.

(*Ligamentum teres hepatis*, *Ligamentum Umbilicale hepatis*, *Chordæ Venæ Umbilicalis*.)

This is the remains of the umbilical vein and lies in the lower border of the ligamentum longitudinale hepatis. It extends from the umbilicus to the inferior vena cava on the under surface of the liver. It is often found patent in adult life and especially in infants. It is divided into two parts, the one part extends from the navel to the transverse fissure of the liver or to the portal, or to the umbilical vein proper, the other extends from the transverse fissure of the portal vein to the vena cava inferior, and is known between these two points as the ductus venosus or ligamentum venosum. If the kidneys do not act, the urine may be discharged at the navel through

the umbilical vein. The round ligament endows the lower border of the longitudinal ligament with a smooth, round surface over which the viscera glide too and fro. It is white in color and about the size of a large wheat straw. The round ligament, like all other viscera, lies entirely outside of the peritoneal cavity and its lower end, during the process of atrophy, blended to the sheath of the rectus muscles for some distance above the umbilicus, in a similar manner to the blending of the urachus and the arteriæ hypogastricæ below the umbilicus. It measures two to three inches in adults from the umbilicus to the notch on the anterior border of the liver, and then extends on the under surface of the liver, two to three inches to the portal vein, and finally to the inferior vena cava. The general direction of the round ligament is from right above at the anterior liver border to left below at the umbilicus. It may be difficult to understand how the longitudinal ligament comes to be perpendicular in the adult.

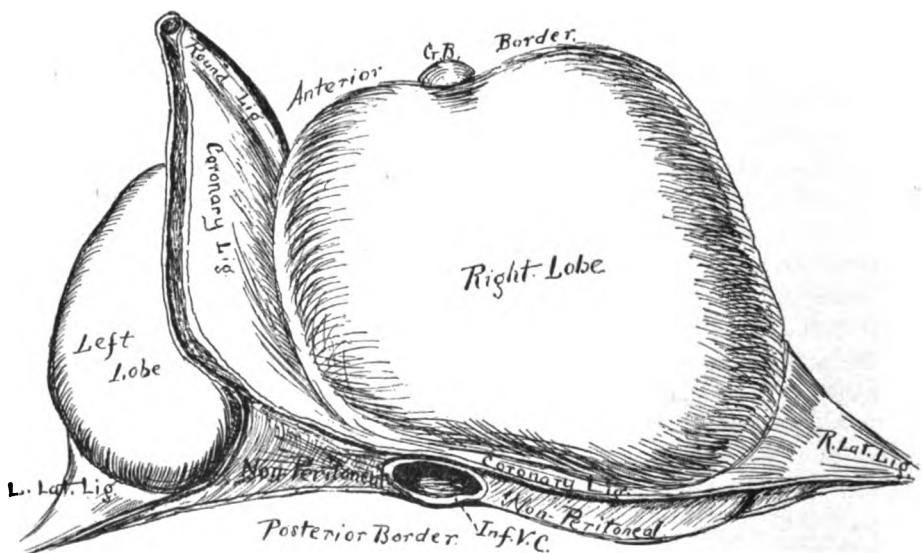


FIG. 5.

Fig. 5 (after Byron Robinson) shows the ligaments of the liver. G.B. is the gall bladder. The rest explains itself. The torn suspensory ligament is drawn as if in situ. It is wrongly designated coronary ligament in the figure. The suspensory ligament is drawn with its parietal insertions showing a wide border. The figure presents the upper surface of the liver.

The whole position is due to the peculiar mode of development of the liver. In early fœtal life the liver develops very rapidly and in some way not yet very clearly understood, with the diaphragm. The liver grows toward the thoracic region, especially on the right for several reasons, (a) because the fœtal lung is small and allows the liver to grow in that direction; (b) the heart is more

to the left side and does not allow the liver to expand in its direction; (c) the musculus suspensorius duodeni (mesenterii) affords a kind of fixation to the point of the duodenum where the gall-duct empties; (d) the umbilical vein (later ligamentum teres hepatis) resists the growth of the liver downward, as may be seen in the large foetal notch in the anterior border of the liver; (e) the uneven atrophy of the liver; the closure of the visceral plates and the elevation of the diaphragm.

(To be Continued.)

DIAGNOSIS OF INTRA-ABDOMINAL TUMORS.

BY A. H. CORDIER, M.D., KANSAS CITY, MO.

Lecturer on Abdominal Surgery, Kansas City Medical College. First Vice-President of the American Association of Obstetricians and Gynecologists.

I fully appreciate the vastness of the subject I am to read about today, and I am aware how much must remain unsaid in a short paper. I realize that there is nothing of more import to the reputation of the surgeon; the good name of the family attendant, and last, but not least, the welfare of the patient, than a correct diagnosis. A correct diagnosis is especially desirable in abdominal surgery. For it is here that an error in an opinion bearing on the diagnosis, and bad judgment in resorting to surgical methods are expensive to human life. While I do not claim that a positive diagnosis is possible in every case, I do believe that, with a few exceptions, an absolute and correct opinion can be arrived at in most cases. A tyro can say that this case or that has a tumor in the abdomen; and that, too, with his imperfect methods of investigation, but he could not, without accidentally guessing it, give an opinion deserving of much credence. I would not have you believe for an instant that I think the diagnosis of intra-abdominal neoplasms an easy undertaking. Far from it. I consider it extremely difficult unless the recognized methods of investigating these cases are carried out in their fullest details. This is what makes it difficult. When we fail to make a positive diagnosis let us look back over our methods closely, and see if some of the details have not been either neglected or ignored entirely.

Lives have been lost as the result of an exploratory incision, the necessity of which might well have been avoided by a careful examination and a well-gotten history. An exploratory incision should not kill, but it has, in the practice of the most skilled and experienced surgeons.

In examining a patient the following methods and procedures should be followed:

- Inspection.
- Palpation.
- Percussion.
- Auscultation.
- Exploratory puncture (dangerous).

To which we may, in addition, call to our aid:

- 1.—Microscope.
- 2.—Chemical re-agents.
- 3.—Anæsthetics.
- 4.—Photography.
- 5.—Illumination.
- 6.—Distension with gas or liquids.

The surgeon should early learn to observe what he sees. With this faculty uncultivated his deductions must be faulty. By inspection we detect the surface landmarks—the skin discoloration and markings or any cacheia the patient may be suffering from as manifested on the surface. The movements of the intestines, or other movements from within are often discernible. Any irregularities of the surface or bodily symmetry are quickly recognized by the trained eye. It is necessary to recall these various methods as aids to diagnosis only to suggest their application, but it is here we are too often faulty in the carrying out of the details and in correctly interpreting their significance. The natural topography of any region under investigation should be familiar, and the infrequent physiological deviations these localities present should be taken into consideration in making a deduction as to the character of the pathology. Some growths appear in certain organs with a frequency suggestive of an inherent tendency or affinity for that organ, while another form of growth uses the age period as its elective time of development, without or with a special disposition to affect any given part. All these traits of the suspected neoplasms must be duly weighed. Of much import is the clinical history, without which a positive diagnosis is only problematical. Endeavor to first determine if the growth is of a fluid or solid character. Having satisfied the mind on that point, try to determine whether you have to deal with a malignant or benign growth. Here the duration of the presence of the growth, the effect on the constitution, the injury to surrounding organs, and the organ supposed to be affected will bring you nearer to an understanding of what you have to deal with. The examination of the various discharges, both natural and fistulous, often reveals truths invaluable as aids to a positive diagnosis.

In the elimination of the various supposed abnormal conditions,

credence must be given the peculiar, though not rare trait some organs have of leaving their natural habitat, or to others that have been anchored by one of nature's faults during the intra-uterine life of the individual. Even the rare occurrence of transposed viscera must not be lost sight of.

Tumors through which gases are detected by the gurgling, indicate either an involvement of the bowel in the tumor, or pressure of the growth on the bowel, with adhesions to the same. Now, if this symptom be coupled to a history of a pyloric cancer or a cæcal growth, it is confirmatory in its indications. Some growths have a disposition to change positions, but all growths have one or more attachments, and it is safe to infer that this attachment is to the site at which the neoplasm had its beginning, and its movements will be only around an arc of a circle with the pedical attachment to the *diagnostic point*. Adhesions may prevent a growth from moving, or may anchor a growth in a locality far from its original point of starting. The history of inflammatory attacks and the pain will come to your rescue here. The character of the pain and the amount and area of tenderness are invaluable aids. The withdrawal of free fluid from the peritoneum will often show the presence of a tumor before undetected. I know of no condition requiring a more careful examination in order to decide as to whether all or part only of a fluid in the abdomen is free or enclosed in a sac.

Tumors of the stomach, as a rule, develop in localities most accessible to the examiner; that is, in the anterior wall and movable extremity of the organ. Gaseous distention of the organ often determines the existence or absence of a growth in this viscus, and at the same time leads one step closer to a diagnosis by eliminating or confirming the stomach as a suspect.

Discharges from natural outlets or fistulous openings should be examined most carefully, macroscopically and microscopically. The use of chemical re-agents should also be resorted to in most instances where a doubt exists as to the exact character or source of the material being examined. By this precaution bile, urine, pancreatic, gastric juices, fæces, etc., may be detected in fluids escaping from unnatural openings, the character of which could not otherwise be determined. Tumors of displaced or ectopic viscera require careful scrutinizing to avoid mistakes, but usually can be detected by recalling the natural site of that viscera and detecting its absence from its natural locality. Vascular tumors, aneurisms and aneomata have characters peculiar to themselves, the pulsation being in unison with that of the heart. The fœtal heart sounds are quicker and are of a somewhat different character, but should be thought of in examining a growth in the lower abdomen of a female patient.

An enlargement of an organ, due to an obstruction of its venous system may simulate a neoplasm, and thus mislead the surgeon, such being the case in splenic enlargements accompanying cirrhosis of the liver. Here a close enquiry as to the habits and presence of ascites, and often hemorrhages from the stomach are diagnostic. A thorough knowledge of the anatomy and physiology of the nerve supply of a given locality is essential in correctly interpreting the significance of localized and referred pains. Localized tumors, due to a dyscrasia, as syphilitic nodules of the liver, may be diagnosed both by the history and evidences of the constitutional disease in other parts of the body. It is often difficult to obtain a correct clinical history from the patient, but a close inquiry from the physician will usually elicit quite an exact history. The physician should never make his questions in a leading manner. As a rule, early growths are diagnosed much more easily than if they are seen late, when many complications, due to involvement of distant or surrounding structures are present, and all normal landmarks are destroyed and the original pathology is found blended with that of a later period.

I am cognizant of the statements made by some of our best operators that it is impossible to make a diagnosis prior to an exploratory incision, yet I do not agree with them. They are great men as operators, but when it comes to sitting down to deliberately get a correct history, and to resorting to all the diagnostic methods applicable, they are sadly wanting in patience, time and disposition to go at it thus, systematically.

They simply say, 'We have here something to be removed' and cut down on it, and either complete the work or close up.

The retention of sufficient physiological material or fluids to cause a perceptible tumor will produce, as a rule, evidences of a partial or complete suspension of the physiological action of these fluids, or the indications of a diminished or changed character of that escaping from the body. The tumors of the gall bladder, and hydro-nephrosis, may be cited as illustrative of each of these conditions. These growths (cysts) may, and often do disappear, and their temporarily suspended function is resumed. A tumor, fluid in character, on either side, that from time to time disappears to reappear again, is always a hydro or pyo nephrosis.

Photography, with its wide application, has been used by myself and others as a diagnostic helper. It has served me well in demonstrating to a hysterical patient how fruitless were her attempts to deceive me in her endeavors to palm off the spurious for a genuine article. A photograph of her protuberant abdomen while awake, and another while under an anæsthetic, soon convinced her that her tumor was a brain tumor in the abdomen—a phantom.

Size perception is best understood and recorded by the aid of the camera. A comparative record of growth is thus accurately recorded rapid growths simulating pregnancy may be thus recorded from time to time.

The camera has invaluable uses in recording cases. Landmarks may be made by the surgeon with pen and ink on the abdomen and their relationship to rapidly growing neoplasms faithfully recorded for comparison at some future time.

Transient physiological enlargement of an ectopic organ is noticed only in two organs, the spleen and the kidney, the former during digestion or soon after a meal, or during acts of physical exertion and the latter during the menstrual period. Enlargements that are sudden or that develop within the space of a few moments (?) or hours are always due to either hemorrhagic infiltrations, the presence of retained or extravasated air or gas, or to the rapid accumulation of retained physiological products. The mere mention of these occurrences is all-sufficient to recall the diagnostic methods necessary to make a correct deduction in the majority of instances. If every physician would familiarize himself with the clinical history of the presence of pus or other septic material there would be fewer cases of malaria, grip, typhoid fever and neurasthenia.

To make a diagnosis in a consultation is often very hard, for it is here that one usually has the opinion of one or more practitioners as to the condition, they having examined the case before you are called. It is a good and proper practice for you to take the case for examination, as though you had not had an opinion expressed to you by any one. You thus go into the case not with the conviction that you have this or that preconceived condition, but with the knowledge that something is wrong, and the belief that you can find out for yourself what it is by a thorough and systematic examination such as I am advocating in this paper.

Pus in the pelvis is, to me, one of the easiest conditions diagnosed. A few years ago the negro race was considered especially liable to the development of uterine fibroids; so much so that some older authors estimated that from 40 per cent to 60 per cent had, at some period of their existence, these neoplasms. But with the advance in knowledge, during the last decade, in pelvic pathology, it is found that these growths are not found with greater frequency in the colored than in the white race. On the other hand, they are very frequently afflicted with ovarian abscesses and pyosalpinx, conditions the sequelæ of gonorrhœa, abortions and tuberculosis.

The oculists have developed the science of diagnosis to such an extent that it is almost exact. Why should we not be able to do likewise in abdominal diagnoses, where our lesions are larger and more

easily defined? The oculist to-day can make diagnoses which, had he only claimed the ability to make a few years ago, would have caused only words of ridicule and disbelief. The eye conditions in locomotor ataxia and retinitis albuminurica are discernable long before the general manifestations can be discerned.

Gentlemen, as you see, I have not taken up individual neoplasms, but have generalized by touching principally upon the salient diagnostic points that enable one to eliminate or to arrive at his diagnosis by exclusion. I trust that you will make up in the discussion for the shortcomings in my article.

REPORT OF A CASE OF RUPTURE OF THE URETHRA, ACCOMPANIED BY EXTENSIVE EXTRAVASATION OF URINE, SUCCESSFULLY TREATED BY PERINEAL SECTION AND RETROGRADE CATHETERIZATION.

BY ORVILLE HORWITZ, B.S., M.D.

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Retrograde catheterization was first performed by Verguin, in 1757, by the introduction of a catheter into the urethra through a pre-existent fistula of the bladder. Sedillot, writing upon the subject, expresses a belief that a retrograde catheterization is the proper course to pursue in cases of impassable stricture, or rupture of the urethra, in which the posterior end of the urethra could not be found after making the incision in the perineum.

Retrograde catheterization is not of frequent necessity, but the successful termination of several operations of this kind that we have witnessed, and the experience that we have had with the case that is about to be reported, leads to the inference that the surgeon should not hesitate to resort to this procedure if inordinate difficulty is experienced in finding the distal end of the urethra.

The patient whose case we are about to recount was brought to the Jefferson Hospital by Dr. Irvin A. Fries. Its history is briefly as follows:

The individual was a laborer, thirty-six years of age; married. Whilst standing on a ladder he slipped and fell a distance of some ten feet, lighting astride of a fence, and violently striking the perineum. He was picked up unconscious, which condition lasted a short time; when on regaining consciousness he found that his perineum,

scrotum and thighs were much swollen and discolored. Any attempt to void his urine was attended with great pain; at the same time he passed a great quantity of blood. An effort was made to pass a catheter without success, and he was advised to enter a hospital for operation. This he refused to do. The following morning the swelling was enormously increased, and had extended to the penis and abdomen. There was complete retention of the urine, the bladder reaching to the region of the umbilicus. Frequent attempts were made to draw off the urine without success. Late in the afternoon the patient consented to an operation, and forty-eight hours after the receipt of the injury he was brought to the hospital. He was in a very perilous condition.

The modification of the Wheelhouse staff, devised by us, which has been fully described elsewhere, was passed as far as the membranous portion of the urethra, and although the urethral canal was very deeply seated, consequent on the perineum being enormously swollen, no difficulty was experienced in opening the passage.

The hemorrhage was very profuse; the bleeding coming from all portions of the wound. It was, however controlled by means of hot water and the use of a number of hemostatic forceps, which were allowed to remain in position for two days. After the wound had been rendered dry, a persistent search was made for the distal end of the urethra, without success. As the patient was in a very critical condition, and as the operation had already been somewhat prolonged, it was decided that it would be safer to perform retrograde catheterization at once rather than to lose more time looking for the concealed end of the urethra.

Superpubic cystotomy was performed without difficulty; the bladder being distended to its utmost capacity. The first incision through the skin allowed the escape of a large quantity of urine which had extravasated through the ruptured urethra into the perineum. After penetrating the bladder and allowing the urine to escape, an attempt was made to pass a catheter into the vesical orifice of the urethra; the emptying of the viscus had allowed it to sink very deeply in the pelvis, and it was only through the aid of an assistant, who inserted a finger into the rectum and pushed the base of the bladder upward, that the urethral opening could be reached. A silver catheter was then inserted, carried through the prostatic urethra and for a short distance into the membranous portion of the canal, where its onward progress was arrested. On examination of the perineal wound it was found that the distal extremity was turned on itself, and had become wedged into the surrounding crushed tissues. This condition was undoubtedly brought about by the attempts made at catheterization before the operation.

The action of the catheter had forced the end of the canal

tightly down into the surrounding structures, much as a ramrod presses down a load of shot into a gun-barrel. The condition of affairs was such as to render it absolutely certain that had not a retrograde catheterization been performed the end of the urethra would not have been discovered.

After opening the membranous portion of the urethra in the manner described, free incisions were made into the penis, scrotum, thighs, and the gluteal region, permitting the escape of large quantities of urine which had extravasated into those structures.

When the operation was completed it was found that the bleeding from the perineal wound was not only very free, but that it was impossible to control it without packing the part very firmly with iodoform gauze. This precluded the insertion of a catheter, so that a large size draining-tube was placed in the bladder, through the suprapubic opening, and a few stitches inserted.

The shock to the patient was great, but he soon rallied; at the end of two weeks he was again etherized and the continuity of the urethra which had become blocked by the packing was established.

The opening of the urethra could not be found through the perineal wound. The superpubic incision was rapidly dilated, and, recollecting the difficulty experienced in reaching the urethral orifice of the bladder on the previous occasion, a rectal bag was inserted, and then filled with ten ounces of water, which lifted the base of the bladder up to within easy reach of the finger. On passing a silver catheter toward the membranous portion of the urethra through the urethral opening of the bladder, it was discovered that the part had become completely occluded by the deposit of granulation tissue, which accounted for it not having been discovered in the perineal wound. The urethra was liberated by a simple cut of the knife, when the end of the catheter protruded into the incision in the perineum.

The catheter was employed to guide a Teal gorget into the bladder, and after removing the catheter from the bladder a full-sized silver instrument was passed from the meatus into the viscus; the gorget served to guide it into place.

The gorget being removed, the catheter was tied in position and allowed to remain in place until both the superpubic and perineal wounds had healed, which required about four weeks. At the end of seven weeks from the date of his admission the patient left the hospital perfectly cured.

A careful analysis of this case would seem to justify the following conclusions:

Where an impossible stricture is present, especially if we are warranted in suspecting the existence of diseased kidneys, or in cases of rupture of the urethra, with indications of perineal section, should

there be any difficulty in finding the distal end of the urethra, rather than prolong the operation, it is safer to perform retrograde catheterization with as little delay as practicable.

In cases of retention of urine, where the bladder is distended and superpubic cystotomy becomes necessary, the operation is very simple and requires but a few minutes for its accomplishment, and little time need be lost in resorting to retrograde catheterization.

Should the bladder be emptied or contain but a small quantity, of urine the procedure is more difficult, and a longer time is needed. The patient should be placed in the Trendelenburg's position. Great care is to be observed not to injure the peritoneum, which, in this condition, lies directly over the viscus; by taking the pubic bone as a guide and going directly downward. The bladder can be easily found and the serous membrane covering it can readily be pushed out of the way by means of the forefinger or the Allis dry dissector.

When the urine has escaped from the bladder and it is desirable to pass a catheter through the vesical orifice of the urethra the operation is facilitated by first distending the rectum by means of the rectal bag.

External perineal urethotomy without a guide, when there is an impassable stricture, or a ruptured urethra, is far from a simple operation; a good, steady, strong light and infinite patience are needed to insure success.

Time is saved and the operation much simplified by using the modified perineal staff of Horwitz.

Much valuable time is often lost by the attempts of the operator to ligate bleeding vessels, which lie in the deeper-seated portions of the wound, imbedded in cicatricial tissue. In a number of the operations of the kind that we have recently performed no effort was made to ligate these deep vessels. Hæmostatic forceps were applied and allowed to remain *in situ* for from twenty-four to forty-eight hours. By resorting to this method of procedure no difficulty was experienced and the operation was completed in one-half the time otherwise required. We have frequently allowed from six to eight forceps to remain in a wound at one time.

We cannot too strongly urge upon the profession that the cause of failure to give permanent relief in many cases of external urethrotomy is owing to the fact that many operators allow the catheter to be removed on the fourth or fifth day, so that by the time the individual is ready to leave the institution the urethra, which just after the operation would have tolerated a full-sized instrument, has contracted to such a degree that only a small bougie can be introduced, inserted with difficulty, and giving rise to a great deal of pain. After leaving the hospital the patient usually neglects to have an instrument regularly passed, and in the course of twelve months the stric-

ture has contracted to such a degree that more frequently than otherwise the operation has to be repeated.

In the last seventeen cases upon which we operated a full-sized catheter was inserted, tied in place, and allowed to remain in position until the perineal wound was healed, usually requiring a period of from four to six weeks. The instrument must have attached to it a rubber tube, to be carried to a vessel underneath the bedstead, so that the patient and the bedclothes may be kept dry.

The catheter and urethra are to be daily irrigated with a warm solution of boric acid, in the proportion of ten grains of the acid to the ounce of water.

The number of cases that we have successfully treated by this method warrants the conclusion that the suggestion is valuable to the practitioner, and in commending it to the profession we are recommending a means of substituting for a diseased or contracted urethra one of full calibre; for, if the catheter be allowed to remain in position until the wound is closed, not only is the patient dry and comfortable, but a new urethra forms around the instrument, which when removed may be replaced by a full-sized bougie, which can be passed with ease. This the patient should continue to use, at first as frequently as twice a week, later on once a week, and finally once a month; to be continued during his lifetime, that is, if he wishes to avoid future trouble.

NOTES OF SOME CASES ENCOUNTERED IN A COUNTRY PRACTICE.

B. L. EASTMAN, M.D.

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1.—*Perineal Drainage for Acute Cystitis with Enlarged Prostate.*

J. M., 55. Urinary trouble, ten years; present attack began a week ago with frequent urination; vesical tenesums strong and constant severe pains referred to the bladder.

Examination: Patient urinates every ten to fifteen minutes with considerable strain and severe pain, urine passed each time small in quantity, offensive odor, alkaline, heavy sediment of pus and mucus, prostate size of small orange and very sensitive, catheter obstructed by prostate gland, irrigation of bladder impossible, general condition poor, pulse 130, temperature 103; medical treatment unavailing for forty-eight hours.

Operation: November 19, 1893. Chloroform, usual aseptic preparations, filiform bougie as a guide, urethra opened just in front of prostate, prostatic urethra dilated with finger, bladder irrigated, drainage tube left in bladder.

Result: Slight shock, tube impossible to keep in place even with the stitch, little improvement in pain or tenesmus during first two weeks, convalescence slow, perineal wound healed in five weeks, patient up in six weeks. Prostate same size as before. No severe attacks since. Suprapubic drainage would have been infinitely better in this case, and in similar cases in the future will be done instead of the perineal route.

2.—Suprapubic Lithotomy.

M. S., 62. Urinary trouble for twenty years; invalid for last five years; two small calculi passed during last three years; bloody urine once, urination frequent, severe tenemus and straining; almost constant pain in suprapubic region; exhaustion from pain and loss of sleep.

Examination: Pin-hole meatus, catheterization or sounding impossible, prostate moderately enlarged, general condition poor, nutrition bad, urination two or three times hourly with very evident pain and straining, urine smaller amount, one-fifth pus, mucus and phosphates.

Medical treatment for four weeks without benefit; exploratory operation and drainage urged and accepted.

Operation: January 15, 1894. Aseptic preparations, chloroform; eight ounce rectal bag introduced and filled with water; meatus split up; catheter introduced and bladder moderately distended. Three inch median incision just above pubis. Bladder easily reached, opened on end of catheter; bladder walls stitched to ventral incision. Nine calculi removed; all about the size of a 'comma' marble; slightly more oval than round; all smooth, several faceted; total weight 320 grains. One broken afterward showed a dense outer layer with friable center. Bladder drained.

Result: Little hemorrhage or shock, drainage removed in two weeks. Suprapubic fistula healed in five weeks. Convalescence fairly rapid. At this time, twenty months later; no return of pain or straining, bladder holds four ounces of urine. Patient is well and hearty.

3.—Nephrotomy for Pyonephrosis.

C. B., boy; twelve years old, indefinite history, pneumonia (?) three months ago, poorly ever since, fever, chills, dullness and slight cough and loss of strength.

Examination: Boy is markedly septic, skin yellowish and damp, nutrition very poor, slight hacking cough, no expectoration, pulse 130, temperature 104, respiration 30, chest negative except for a few scattered rales. Abdomen: left lumbar region more prominent than right; dullness from spine to nipple line and from crest of ilium to

costal arch; sensation that of a deep-seated tumor, immovable and not sharply outlined, tender over all, no fluctuation.

History carefully reviewed and this ascertained: his pneumonia(?) consisted solely of fever and pain in this region, no dyspepsia, rusty sputa or crisis. Two years ago had stoppage of urine with very severe pains in this region and back, lasting twenty-four hours. Nothing known concerning quantity or quality of urine. No calculus ever passed. One week later, urine examined, one-third pus, acid, very offensive; patient worse, much weaker, pulse 140, temperature 105, chill in the office. Large hypodermic needle introduced into center of swelling, two inches above middle of iliac crest, passed inward and backward, and at a depth of two inches passed through a very dense body, then apparently entered a cavity from which a few drops of thick foul-smelling pus was obtained.

Diagnosis: Perinephritic abscess, communicating with pelvis of kidney; tubercular kidney or pyonephrosis.

Operation: May 22, 1895. Usual preparations; chloroform, right latero-prone position, four-inch horizontal incision as for lumbar nephrectomy, kidney easily reached, was fully twice normal size, cortex firm, kidney freely opened, three ounces thick foetid pus evacuated; very careful digital examination revealed nothing except dilated pelvis, urethra not explored, large drainage-tube passed down into pelvis and secured with a stitch, surprisingly small hemorrhage from parietes or from cortex of kidney, severe shock, kidney irrigated daily for three weeks.

Result: Free escape of urine and pus during first twenty hours, after that little urine escaped, but discharge of pus continued. Temperature dropped to 100 and never rose again above 102, wound granulated rapidly, urine thirty ounces daily, convalescence slow. Four weeks later two small calculi passed from opening in the side, one the size and shape of No. 1 buckshot, the other oblong, weight of both fifty grains, probably had been in first part of ureter, certainly not in the kidney at time of operation. Since then he has gained remarkably fast.

September 1.—Boy fat and hearty and of good color, small sinus persists, discharge constantly lessening. Urine acid, natural odor and free from deposit or sediment.

4.—*Empyema, following Croupous Pneumonia.*

W. E., 22, male. Croupous pneumonia, left upper lobe, typical course and symptoms more pleuritic from those usual in upper lobe pneumonia, crisis on seventh day. Two weeks after crisis complained of persistent pain in the side, malaise, anorexia, fever, sweats and increasing weakness.

Examination: Left chest stationery, flat percussion not epos-

teriorly from apex to base, anteriorly below third rib, respiratory murmur and voice sound absent below fifth rib, exaggerated above third, heart pushed to right, apex beat close to sternum in fifth right interspace, pulse 140 and irregular, temperature 102, respiration 40. Needle introduced in sixth left interspace, nipple line, reaches pus freely.

Operation: February 15, 1895. Usual preparations, ether; three inches of sixth rib resected sub-periosteally beginning just in front of scapula; pleura opened, three quarts white odorless pus evacuated slowly, drained well with large tube, no irrigation. Dressed only without irrigation, cavity closed in six weeks. Serous effusion occurred on opposite side reaching to fourth rib, subduded with salts and digitalis.

5.—Empyema following Pleuro-Pneumonia.

J. B., 50, male. Corpulent habit, severe attack of pleurisy with consolidation of small strip along base of left lower lobe. Four weeks after crisis, malaise; weakness, fever, sweats, obstinate cough and frequent vomiting.

Examination: Flatness over whole left chest, needle gives free pus, one quart removed with pump to allow lungs to expand somewhat, pulse 120, irritable, respiration 30, temperature 100-101.

Operation: May 5, 1895. Same in detail as case 4, except the seventh rib chosen instead of sixth, two quarts of pus evacuated, patient almost died from respiratory failure when pleura was opened in spite of the very slow evacuation of the contents, chest drained, no irrigation, cavity closed very slowly, thick chest wall made drainage difficult, sinus injected with iodine solution when cavity became small, closed in three months, patient as well as before his illness.

6.—Empyema following Chronic Pleuritic Effusion.

H. S., 29. Pleurisy with effusion for three years, tapped four times: 120, 60, 30 and 80 ounces of water removed during the three years. Hemoptysis twice during last twelve months.

Examination: Poorly nourished, tubercular habit, frequent irritating cough, little expectoration, occasional feverish spells, no chills, increasing weakness, invalidism for last six months, pulse 110, temperature 101, right chest bulges markedly, flatness in front and behind. Large needle and aspirator used, pus found instead of serum, eighty ounces evacuated.

Operation: July 29, 1895. Estlander operation planned but patient took anesthetic so vilely that he wore himself out before relaxing; ether and chloroform both tried, same result.

A portion of the sixth and seventh ribs resected for drainage,

one quart white odorless pus evacuated, no irrigation, hemorrhage during first twenty-four hours, arrested with hot water.

Result: Satisfactory for first three weeks, patient up and about, feeling well, then febrile symptoms developed, temperature ranging from 99 to 102½, nausea, anorexia, occasional chills, loss of strength, cavity not decreasing in size and does not drain one drop except as patient turns onto side, daily irrigation began, also free exhibition of quinine, no rose spots, no diarrhoes, very little improvement, patient lives in an adjoining town, in a neighborhood noted for typhoid and for malaria. Diagnosis as well as prognosis doubtful.

7.—*Strangulated Hernia in a Man of Eighty Years.*

J. D., 80, farmer. Has had left inguinal hernia for sixty years, right hernia for thirty-five years.

Examination: Patient appears as old as stated age, arcus senilis, skin dry and wrinkled, arteries hard and tortuous, nutrition poor, right complete inguinal hernia size of small orange, strangulated twelve hours, attempted reduction under chloroform by family physician had been unsuccessful, condition poor, frequent vomiting, not fecal, obstinate constipation, pulse 100 and irregular, considerable shock.

Operation: February 26, 1894. Chloroform, sac exposed by a three-inch incision, constricting band not found although incision was carried one inch above internal ring, sac opened and constriction found to be the firm fibrous opening of the sac itself, gut dark but quickly brightened after constriction was removed and hot sponges applied, gut replaced, sac isolated from cord, ligated and cut away, ring closed by three heavy silk sutures, skin wound with small silk sutures, silk drainage, wound healed in seven days perfectly with no sinus resulting. Patient in bed three weeks. Twenty months later scar is firm, no bulging, no pulse on coughing.

8.—*Radical Operation for Inguinal Hernia.*

W. M., 28, male. Left incomplete inguinal hernia for two years.

Operation: July 10, 1894. Careful aseptic preparations, chloroform; two-inch incision directly over external ring, sac isolated from the cord, opened and examined, sac twisted, ligated high up with chromic catgut and cut away, cord brought to upper angle of wound, ring closed by three heavy chromic catgut sutures passed through Poupart's ligament and deeply through conjoined tendon opposite, skin wound closed with silk sutures, sac drain. Wound healed solidly in seven days, patient kept in bed for three weeks, catgut knots could be felt beneath the scar for six weeks. Thirteen months after the operation patient has had no recurrence, scar is firm.

9.—*Radical Operation for Inguinal Hernia.*

W. P., 26, male. Right complete inguinal hernia three years, preventing him from doing manual labor.

Operation: October 5, 1894. Chloroform, usual preparations; operations identical with case 8, except on opposite side. Two days after operation patient had an attack of flatulent indigestion which simulated obstruction so closely as to be quite alarming, it quickly subsided under free enemata and morphine, convalescence uninterrupted, primary healing of the wound.

Eleven months later, there is no recurrence, scar firm, no bulging, no impulse, this in spite of the fact that patient persists in doing such work as loading hay and grain into wagons, lifting and carrying heavy loads on his shoulder.

THE TREATMENT OF INTERMITTENT FEVER.

WALTER M. FLEMING, M.D.

Before the discovery of the tubercle bacillus, many a cough was allowed to continue without treatment and the real difficulty not suspected until a sharp hemorrhage or a hectic fever revealed the true situation. Only a few months ago diphtheria patients walked the streets with a simple sore throat, while cases of follicular tonsillitis were carefully treated as diphtheritic in character. Nearly all of us were taught that malaria was an earth-born poison which filled the air with "a fever-generating agent." Now, all this is changed. The tubercle bacilli can be detected in the earliest stages of phthisis. The Klebs-Loeffer bacillus decides the presence of diphtheria; and the malarial germs of Laveran tell us we have an intermittent fever.

It is natural that we look for a remedy which will destroy these germs or counteract their poisonous products. Indeed, it now appears that we have unconsciously to be sure, been giving a perfect specific for the cause of the latter disease. Quinine is no longer administered in an empirical manner. We know precisely why we give it and what it does. Quinine exerts a deathly influence over the malarial germ, therefore it may be given with the satisfaction of knowing that it will invariably check the paroxysms of an intermittent fever. If its use is not followed by this cure, then it is certain that it never came in contact with the red corpuscles of the blood. Absorption was incomplete or the quantity of the drug was insufficient. In the light of all this it is certainly bordering on the ludicrous that the National Dispensatory should give a list of seventy-six remedies in the index under intermittent fever. The patient has usually had a malarial paroxysm before seeking medical advice. As hepatic activity is necessary to obtain the best effect of the specific

treatment, so in cases of constipation at least, it is better to begin the treatment with the following prescription which should be taken five or six hours prior to the quinine:

R Hydrarg. Chloridi Mite

Sodae Bi-carb., aa gr. i

M.—Divide into six powders.

Sig.—Take one powder every fifteen minutes, using all the powders.

This is far preferable to giving the calomel in one single dose and in larger quantity. However, it may be necessary, if the patient is insensitive to purgatives, to increase the quantity in the prescription by one-half. While this preparatory treatment is not necessary, yet it is certainly true that after its employment a less quantity of quinine is required and the general condition of the patient is improved.

It has been stated that this treatment should be given five or six hours before the specific treatment. It should now be said that the latter treatment is best inaugurated at such a time that it will be exerting its fullest physiological action when the next paroxysm is due. This time can be quite accurately stated when we remember that a paroxysm often begins an hour earlier than the preceding one and that about three hours are required for the quinine to be in its most active condition in the body. To insure prompt and complete absorption the quinine is best given in liquid form. The following is a favorite prescription:

R Quinia Sulph., grs. xv.

Aquae, oz. j.

Acid Sulph., dil. q. s. ft. sol.

M. et. Sig.—Take at one dose in one-third glass of water.

With the above preparatory treatment and with the quinine dissolved, this dose is equivalent to at least twenty grains given after the usual manner; while it is certain we should not trust to pills or capsules at such a time unless we know positively that these are in a perfectly soluble condition.

To prevent the uncomfortable head symptoms which accompany full doses of quinine and also to relieve the pain which is likely to be present at the same time of the expected paroxysm, the following prescription should be given four or five hours after the specific:

R Antikamnia Tablets (5 gr. each) No. xxiv (24).

Sig.—One tablet every two hours while pain necessitates.

While the above dose of quinine is sufficiently large for residents of most parts of the United States, yet in some of the Southern states and in other sections where malaria abounds with unusual force, it may be necessary to give the quinine as high as twenty, forty, or even sixty grains. But in the great majority of cases the above single dose will be sufficient to prevent a second chill.

In order that there may be no question about the recurrence of an attack, and also in order to bring the system under the influence of a good tonic, the quinine should be continued for one or two weeks in doses of 5 to 10 grains a day. As the malarial germ has left its effects on the nervous system and often to a marked degree, so a remedy is indicated which will put at rest the disturbed condition. The following will be found satisfactory in every way:

R Antikamnia and Quinine Tablets, 5 gr. each, No. xxiv.

Sig.—One tablet three times a day after meals.

This tablet contains $2\frac{1}{2}$ grs. Sulph. Quinine and $2\frac{1}{2}$ grs. Antikamnia, being the most desirable proportion.

If the physician be called while the patient is suffering from a paroxysm, and he is in doubt as to its nature, he has only to remember that any intermittent fever which resists the action of quinine is not necessarily of malarial origin. Even during the chill of a malarial attack the temperature may rise to 102 degrees or higher, while it is often true that when the chill has passed and the fever is on, the thermometer will show a lower degree of heat. Therefore, no better treatment can be given at the beginning of or during the chill, than the following:

R Antikamnia tablets, 5 gr. each, No. xxiv.

Sig.—Take two tablets immediately. Repeat dose in two hours if pain necessitates.

The antikamnia will relieve the congestion of the abdominal and thoracic organs and will materially alleviate the headache of the second stage especially. In fact it practically robs the fever of its most distressing feature.

When we consider that the cause of intermittent fever is so thoroughly understood and that quinine is regarded as its specific, destroying said cause, how puerile are all attempts to bring forward new substitutes. Although pain may not be dependent upon any special living organism, yet it is certain that in antikamnia we have a most reliable specific.

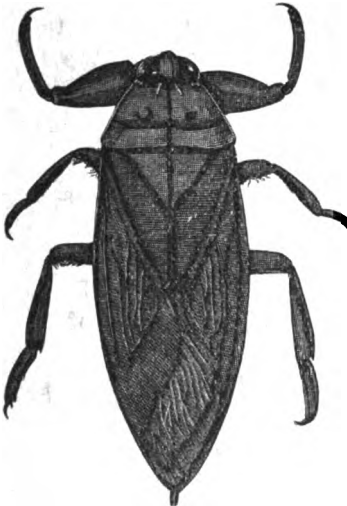
In regard to the treatment of all forms of febrile maladies, periodic or continued, I have found the antikamnia tablets with its various combinations of codeine, salol or quinine (as indicated in each individual case), the most reliable, prompt and satisfactory remedies in controlling these intractable disorders of any remedial agent known to me in any general active practice of over thirty years.

THE POISONOUS STING OF THE "ELECTRIC LIGHT BUG," OR BELOSTOMA, AS IT IS CALLED BY ENTOMOLOGISTS.

BY THEODORE WILLIAM SCHAEFER, M.D., OF KANSAS CITY, MO.

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Since the medical profession has been paying so much attention to the study of "bugs" for the last ten years or more by means of the microscope, I thought that it were not out of place to give some of my personal observations and the results of my study of one belonging to the larger family of "bugs"—without the aid of the microscope—which, I hope, would prove entertaining as well as



instructive. Of course this communication is out of the common rut and conventional style of medical journal articles and is entirely devoid of the dominant, popularized surgical jargon of the day. There is quite a lull in the medical literature of the day in regard to the "big bugs"—the stinging and biting *Hexapoda* and *Irachnoidea*—most of them being pedantically enumerated in the books, the list being considered as closed, as no new additions have been made for some years. I do not remember of ever having seen a description of the belostoma or an account of its sting in any of the medical books and journals. During

the warm, sultry nights of the months of July, August and September the electric lights on the streets attract swarms of insects. Among the multitude of squirming, fluttering insects there is often a very large-sized bug, in fact, larger than any one belonging to the insect convention, making a grand whirl around the bright globe of light, casting its large, dark shadow in every direction. The large bug adverted to is either the so-called "electric light bug," American belostoma, *Belostoma americana*, or *Belostoma griseus*, as it is called by naturalists. The American belostoma, as well as its partner, the *Belostoma griseus*, are quite common in this part of the country (Western Missouri) during the summer. The *Belostoma griseus* looks exactly like the American belostoma, but differs from it in not having a groove on the front joint nearest to the body.

It is somewhat larger and darker than the former. The American belostoma, I find, is about 5 centimeters long, whilst the *Belostoma griseus* measures nearly 6 centimeters in length. The American belostoma is brownish-black in color (erroneously described as black in the books) and belongs to the group of insects called *Heteroptera* by entomologists.

American works on entomology give but a very meager account of the bug. Prof. Clarence M. Weed is the best authoritative writer on the belostoma and its species in this country. The belostoma has two pairs of wings and is armed with two large front legs, well adapted for catching and holding its prey. A strong, sharp claw is attached to each front leg. The four other legs are thick and flat and are used as paddles for swimming purposes. Along the sides of the four legs are fringes and each limb ends in two sharp claws. The belostoma is an aquatic bug and of course lives also in Kansas! In the good, olden times the belostoma spent its leisure time in ponds and pools, where it led a predatory life, but the nineteenth century electric light has somewhat reformed its mode of living and now takes nightly trips to the cities and often "stays there," as they have the vernacular, being frequently killed by pedestrians who walk unconcernedly over it.

Some four years ago I happened to pick up carelessly, on one of my nightly entomological expeditions, a belostoma that was struggling on the ground. Suddenly I felt a sharp pain shoot up my left arm, starting from my middle finger and was obliged to drop the bug at once and had to nurse my finger. On looking at the painful finger under the rays of the electric light I noticed an erythematous coloring at the point where the finger was stung. In the centre was a minute dot, marking the point of entrance of the sting. I immediately sucked out the minute wound, thereby removing a part of the venom. The stinging pain was much relieved by the application of a solution of sodium baborate. The finger smarted for a few days. A papule marked the point of ingress of the sting, which dried and scaled off in ten days.

Later on I carefully caught another belostoma and examined it more closely. I found that it possessed a piercing dagger-like beak which was provided with poison glands, operating on the principle of a hypodermatic syringe. I propose at some future time to make a micro-chemical analysis of the poison and give a description of the anatomy of the poison glands and beak. The belostoma is a carnivorous bug, living from insects and tiny aquatic animals. It seizes its victims by means of its strong, rough forelegs and then stabs its beak deeply into them, permitting the poison to enter the prey, which at once paralyses the unfortunate captive, and adds the finishing touches to it by sucking out its blood or juice.

When I was at the World's Fair in 1893, I visited all the entomological exhibitions of the different countries. The Japanese entomological exhibit had some very large specimens which were four or more inches long. They were of a yellowish-brown color. The Brazilian exhibit had also some very large specimens. The large species is called *Belostoma grande*, or, as its name indicates, the great belostoma. No doubt its sting occasions considerable pain and swelling. Before closing I would like to relate my experience with the common undulating back-swimmer (*Notonecta undulata*.) I was bathing in the River Blue and noticed some back-swimmers swiftly gliding over the surface of the water. They are quite difficult to catch. I succeeded, however, in catching one, but it gave me a sting in the wrist, the mark of which remained red for a few hours. I at once sucked out the poison, which operation gave me prompt relief. Stings of insects are painful and inconveniencing. Occasionally they give rise to serious if not fatal consequences. In these days of inoculation and immunization against infectious diseases the thought very naturally arises whether the toxicological effects of stings and bites of poisonons hexapoda and arachnoides could not be neutralized or rather antagonized by the attenuated poison obtained from their venom?

Dr. A. Calmette, of Paris, France, has been making extended inoculation experiments against snake poisons. Speaking about scorpions, tarantulas, centipedes and poisonous insects, he remarks that he cannot understand why their venom should not yield to the same treatment. Mineral agents have been the sheet anchor, so to speak, in the treatment of these kinds of poisoned wounds, but the future has more ideal remedies in store in the form of anti-toxins derived from the venom of hexapoda and arachnoidea.

EDITORIAL.

THE RECOGNITION OF THE INDEX.

The year closing has been one of activity in medical circles, and the INDEX has shared in the general spirit. During the eleven months just ending there have been offered for publication in our columns nearly one hundred and fifty original articles, all of which have been good and from among which we have selected fifty-nine. Of these twenty-six have been written by Kansas City authors, for we are the KANSAS CITY INDEX. Eight have been contributed by Philadelphia authors, five have been received from St. Louis, four from the Indian Territory and the remainder from New York; Oklahoma; Sherman, Texas; Colorado; Indianapolis, Ind.; Fort Smith, Arkansas; Chicago; Minnesota; St. Joseph, Excelsior Springs, and Moberly, Mo., and Hot Springs, Ark. In addition to these standard and classical articles there have been hundreds of items, notes, points on practice, etc., which our three thousand readers can appreciate and turn to their advantage.

We hope to be able to continue the present arrangement by which the society proceedings of the two vigorous societies of Kansas City will appear in each month's INDEX. We feel justified in our pride upon looking back over the year and note with satisfaction the amount and quality of matter offered our readers.

The present issue INDEX is four pages above the regular size, the next and all following will be from eight to ten pages larger, making over 600 pages of reading matter for the year. A number of prominent members of the profession have signified their willingness to become collaborators to the INDEX staff, and some of the ablest writers of America have promised us contributions for 1896. Every college and society in Kansas City is represented in our columns not once but many times, and such will continue to be the policy of the magazine.

EDITORIAL NOTES.

THE TREATMENT OF INFLUENZA.—It is quite probable that, during the present fall and approaching winter, physicians will be again called upon to treat a number of cases of influenza. Since 1889 more sensible views upon this subject have gradually become prevalent and it is not likely that there will be a revival of the indiscriminate use of anti-pyretic drugs, with their dangerous depressing effects. The first principal in the treatment of influenza is rest, no matter how slight the attack may apparently be; as the gravest consequences sometimes follow upon attacks of least apparent gravity in the beginning. The preservation of body-warmth is likewise important, as the tendency to subnormal temperature and depression of vital functions generally is one of the essential factors of the pathologic processes. Warm drinks, warm covering, and, if necessary, the application of heat externally by means of hot water bags and the like, will accomplish this purpose.

The secretions must be properly maintained, especially those of the skin and kidneys. For this purpose sodium benzoate, which may well be given in solution with compound infusion of gentian and mucilage of accacia, is the best agent at our command. The dose is from 10 to 20 grains every second hour, third hour, or fourth hour, according to circumstances. No other treatment may be required in mild cases. In most cases, however, and especially in children and the aged, it will be wise to administer strychnine as a general tonic and especially as a cardiac tonic. The dose should not be large, as it is not well to exhaust one's reserves in the beginning of action. Strychnin arsenate seems to be better than strychnin sulfate, but either will answer the purpose. The dose of strychnin is $\frac{1}{2}$ milligram (1-128 grain) given at first hourly, until from five to ten doses have been taken; after that every second hour, every third hour, or every fourth hour as may be necessary to keep up the effect. The frequency of administration will, therefore, vary considerably in different cases, according to the severity of the attack, the strength and recuperative power of the individual. For the relief of pain, phenacetin and acetanilid may, in some cases, be given without harm, but we consider it safer to avoid these drugs in every case. Salol, hyoscin hydrobromate and cannabis indica in appropriate doses, according to the nature and distribution of pain, will usually give relief when medication is necessary. In most cases, however, external applications, either hot or cold, according to circumstances; will render medication unnecessary. Opium, codein or morphin may be used judiciously when the measures previously mentioned have failed. The diet should be nutritious and easily assimilable. Alcohol may be used judiciously and in moderation.

In some cases, especially in those in which rheumatoid phenomena predominate, or in which there is fever of considerable degree, cinchonidin salicylate given in doses of five grains four times a day will be found extremely useful; it may be given in alternation with sodium benzoate, or in substitution for the latter; some other means of keeping up the secretions, such as the administration of spirit of nitrous ether, or frequent drafts of hot infusions, being employed coincidentally.

Pneumonia, or the less serious local inflammations, bronchial, laryngeal and nasal, are to be managed on the general principles applying to these affections, with due regard to the special indications of influenza. In cases attended with vomiting it is well sometimes to suspend all medication until the equilibrium of the stomach is regained. In other cases the use of cocain, iodin in minute doses,

cerium oxalate, ice by the mouth or to the neck or over the epigastrium, or some other of the measures usually employed to check vomiting, will be needed.

Care is necessary during convalescence. The patient must not be allowed to go out too soon and must for some time be protected from exposure to cold, and especially from drafts. A tonic such as arsenic, iron, strychnin, compound tincture of cinchona, or wine of coca should be administered for about a fortnight after the full establishment of convalescence.—*Philadelphia Polyclinic*.

A SIMPLE EXPEDIENT FOR THE TREATMENT OF NOCTURNAL ENURESIS.—The *Boston Medical and Surgical Journal* has discovered something that is certainly good if true. The matter bears on its face the stamp of probability, and we should be pleased to have our readers try it on a case of nocturnal enuresis and report. The *Journal* tells us that Strumpf (Munch. Med. Woch.) noticed that when a few drops of urine escapes into the deep urethra it caused a desire for urination. This theory is that during sleep the sphincter of the bladder is apt to become relaxed, so that, as the child lies horizontally in bed, a little urine passes the sphincter and enters the deep urethra. The irritation of this urine causes at once strong reflex action of the detrusor, and the bladder at once empties in a full, strong stream. It is a well known fact that in nocturnal enuresis in children the urine does not leak away gradually, but the bladder is emptied at once, a point which is in support of this theory.

In order to prevent the passage of the urine into the urethra when the sphincter becomes relaxed during sleep, a simple expedient is adopted, namely, the elevation of the pelvis, so that an accumulation of urine of ordinary amount in the bladder will gravitate back and distend the fundus, and not press against and tend to pass the sphincter. The elevation is secured by allowing the child only a single, small, flat pillow under the head, and placing one or two ordinary pillows under the thighs so that they lie at an angle of 130 degrees to 150 degrees with the horizontal spine.

This simple expedient was entirely successful in curing two inveterate cases, one of a boy of nine years, and one of a girl fifteen years old. It was then tried in twelve cases, and was uniformly successful. It was usually necessary to continue the treatment for three weeks, after which time the children were able to return to their former sleeping position without relapsing.

RESTORATION OF JOINT FUNCTION AFTER FRACTURE.—Dr. John B. Roberts contributes the following terse, valuable lines, on the above subject in the "Poly-clinic" (Philadelphia):

"Fractures near joints, but not actually involving the joint cavity, seldom lead to ankylosis, though some temporary muscular stiffness may exist for a few weeks after fracture dressings have been discarded.

"This proposition indicates that retentive apparatus in such fractures should be dispensed with as early as circumstances will permit, so that the stiffness of immobilized joints may be as insignificant and of as short duration as possible.

"Fracture dressings which maintain perfect coaptation of fragments without restricting the motion of contiguous joints are, when other circumstances permit their use, preferable to other dressings which prevent the patient from using these joints.

"When joint cavities are invaded by lines of fracture which do not cause deformity of the articular surfaces or changes of bony contour near these surfaces, ankylosis is uncommon, unless infection leads to severe synovitis or arthritis.

"Permanent loss of motion, partial or complete, after fractures involving joints, usually depends on imperfectly reduced fragments, or on a synovitis or arthritis caused by septic infection, or unwise passive motion.

"Early passive motion adds to the traumatism in fractures involving joints and may thereby increase the formation of intra-articular fibrous adhesions. In

aseptic cases it is unnecessary; in cases in which readjustment of the fragments is imperfect, it does no good; in septic cases it increases irritation and does harm. It should, therefore, not often be employed.

"Late passive motion is desirable to hasten the return of functional usefulness in joints stiffened by muscular rigidity after the fracture apparatus has been removed. It is also serviceable to break up intra-articular fibrous adhesions due to synovitis or arthritis resulting from fractures.

"Massage, soaking in hot water, frictions with liniments, electricity, passive motion and attempts at voluntary movement continued for months will often cause great improvement in the functional usefulness of joints supposed to be irretrievably damaged through fracture."

LITERARY NOTES.

The October number of the *North American Review* is one of the usual excellent type of that magazine. Among the contributors are Dr. Cyrus Edson, Dr. Henry Williams, Hiram S. Maxim, Rev. F. W. Tarvar, Drs. Waldo and Welsh, Major General Nelson A. Miles and others. A most interesting feature is the series of papers under the head of "A Study in Wives," four ideal types of women are portrayed by four well known authors of different nationalities, Max O'Rell describing "The French Wife," Grant Allen, "The English Wife," Karl Blind, "The German Wife," and H. H. Boyesen, "The Scandinavian Wife."

Lea Bros. & Co. announce as "just ready" two new books, "Stimson's Operative Surgery" and Taylor on "Venereal Diseases." They say, "The demand for a third edition of Professor Stimson's excellent *Manual of Operative Surgery* attests the service it has rendered to thousands of physicians and surgeons. The author has utilized this opportunity to place the work fully abreast of the most advanced surgical procedures. The profuse series of illustrations has been largely re-engraved and additions have been made to it wherever clearness and fulness of instruction could be promoted thereby. As surgery is chiefly operative, an authoritative volume on its procedures is an indispensable part of the equipment of every surgeon and likewise of every physician in general practice." The price is \$3.75, cloth.

Of Taylor on venereal diseases the announcement is made that "the frequency of venereal diseases, the effects producible in all tissues of the body and the consequent modification which may be imposed upon all other diseases combine to render it obligatory upon every physician, surgeon and specialist to possess a practical knowledge of this subject. Dr. Taylor has long enjoyed the highest reputation as a practitioner, teacher and writer, his *Clinical Atlas of Venereal and Skin Diseases* and the *Pathology and Treatment of Venereal Diseases*, of which, in the later of its five editions, he was joint author with Dr. Bumstead, being his best known contributions to literature. The present volume is practically a new work, reflecting as it does the immense advances of late years in venereal pathology and detailing the most approved treatment as tested by the author's enormous experience. The series of illustrations in black and colors is likewise new and most instructive. The work will easily hold its place as the foremost authority and the most satisfactory source of information upon its important subject." The price is \$5.50 cloth and \$6.50 leather.

The following books appear upon our table for review:

The Pathology and Treatment of Tumors; Senn. W. B. Saunders, 1895.

Practical Therapeutics; Hare. Lea Bros. & Co., 1895.

Physical and Natural Therapeutics; Hayem. Lea Bros. & Co., 1895.

Practical Dietetics; Thompson. D. Appleton & Co., New York, N. Y.

Clinical Lectures; Gowers. P. Blakiston, Son & Co., 1895.

Nervous Diseases; by American authors. Edited by F. X. Dercum. Lea Bros. & Co., 1895.

SOCIETY PROCEEDINGS.

THE KANSAS CITY ACADEMY OF MEDICINE.

(ORGANIZED 1880.)

ENROLLMENT, 58 MEMBERS.

JOHN PUNTON, M.D., *President.*

JOHN W. KYGER, M.D., *Secretary.*

V. W. GAYLE, M. D., *Vice-President.*

CHARLES LESTER HALL, M.D., *Treasurer.*

ANNUAL DUES, \$4.00.

MEMBERSHIP DUES (paid but once) \$10.00.

Meets every Saturday evening at eight o'clock, in Parlor 8, Midland Hotel.
Visiting Physicians Welcome.

At the meeting of the Kansas City Academy of Medicine, held at the Midland Hotel, on the evening of October 26, Dr. S. G. Gant read a paper on "Proctitis and Peri-Proctitis." He mentioned as the varieties acute, chronic, dysenteric, gonorrhoeal and diphtheretic. The symptoms were variable, generally tenesmus weight and falling with mucous and blood discharges. Fecal impactions, cold and exposure, and the presence of foreign bodies were among the causes. Gonorrhoea of the rectum was rare in this country, but in France, and other old-world countries, frequent. Diphtheretic affection was not often seen. Prognosis not fatal nor serious if the cause can be located and removed, and if conditions are not complicated.

Treatment: Remove the cause and open the abscess, if any. Rest is indicated after cleaning of the bowels by epsom salts and by injection. The diet should be milk, soft boiled eggs and similarly digestible articles. Astringent injections should be used after the cleaning. In gonorrhoea, use hot water. In erysipelatous and gangrenous conditions treat as the same are treated elsewhere in the body.

In more aggravated forms, without specific infection, cold, rest, alum water and balsam of Peru, the curette, antiseptics and packing were used as conditions indicated. In membranous enteritis, where the exudation is something like a diphtheretic membrane, the introduction into the bowels of three ounces of a mixture of a pint of olive, almond or cotton-seed oil, an ounce and a half of sub-nitrate of bismuth, and four drachms of iodoform has an excellent effect.

Dr. Samuel Ayers spoke of advantage he had found derived from the use of local xenoma of opium copiously in a severe case of the gonorrhoeal kind.

Dr. George M. Gray, of Kansas City, Kansas, spoke of the urgency of the early use of anaesthesia in dilating the anal sphincter for examination instead of permitting the patient to go on suffering.

Dr. C. B. Hardin, of the committee on anti-toxine, made a partial report from data obtained from Professor William H. Welch and Prof. Hermann Biggs, showing a general decrease of from 26 to 40 per cent in the mortality rate caused by the use of anti-toxine.

Dr. V. W. Gaye was added to the anti-toxine committee and it was given further time to report.

Dr. H. C. Crowell presented a cut of the members of the Academy of Medicine of Grand Rapids, Mich. It was received and ordered framed.

It was announced that Dr. B. Sachs, of New York, would lecture here in December on "Syphilis of the Nervous System."

THE JACKSON COUNTY MEDICAL SOCIETY, OF KANSAS CITY, MISSOURI.

(ORGANIZED 1874.)

ENROLLMENT. 138 MEMBERS.

H. C. CROWELL, M.D., *President.* JOHN B. MITCHELL, M.D., *Secretary.*
LOUIS W. LUSCHER, M.D., *Vice-President.* CHARLES A. DANNAKER, *Treasurer.*

ANNUAL DUES, \$3.00.
MEMBERSHIP DUES (paid but once) \$5.00.

Meets second and fourth Thursdays of each month, at 916 Walnut Street at 8 p. m.
Visiting Physicians Welcome.

The Jackson County Medical Society met at its rooms at 916 Walnut street, on the evening of September 26. Dr. H. C. Crowell was in the chair with Dr. J. T. Mitchell, secretary.

Dr. Edward G. Blair and Dr. E. W. Riley were admitted to membership.

*DR. THOMAS J. BEATTIE read a paper on "Diseases of Women and their Relation to Ophthalmic Trouble"

DR. GRAVES spoke of the connection of the eye and uterus by the lenticular ganglion and the sympathetic system but did not attach much importance to the matter. He had seen the same trouble complained of in girls.

DR. J. H. THOMPSON stated that he had seen many of such cases, depending on reflex causes, but had never been able to trace exactly the cause from uterine disturbance to the eye. Gonorrhœa in males produces optic disturbance, hysteria and neurasthenia in women also cause disturbances. In cases of this kind he found no good in assisting the accommodation with glasses. Other treatment with rest and nourishment was indicated.

DR. W. C. TYREE knew there was a general belief in the sympathy between the uterus and the eye. While there might be something in it, yet disorders of the kind were by no means as prevalent as some present seemed to suppose. In uterine disorders he thought the eye to be no worse affected than other parts of the body. When the eyes showed upon examination deviation from the normal, they were generally cured by a proper glass and proper treatment, and not by uterine medications.

DR. F. B. TIFFANY alluded to the intimate connection between the generative system and the eye. He spoke of the blindness of pregnancy being cured by delivery.

DR. J. F. Wood doubted if a normal eye would be particularly affected by a diseased uterus, but the eyes thus affected sympathetically were already in a pathological condition. He spoke of concentric narrowing of the field of vision in hysteria, independent of uterine trouble.

DR. L. K. DIBBLE mentioned a case of chorea, caused by a refractive error, cured in four weeks by the use of glasses. He spoke extensively detailing other cases of sympathy between the eye and nervous system.

DR. LOUIS W. LUSCHER was of the opinion that error of refraction caused uterine troubles by reflex.

DR. B. E. FRYER said that every oculist knows for a certainty that many cases

*Owing to some unfortunate misunderstanding we have failed to receive an abstract of Dr. Beattie's paper.

of uterine or ovarian troubles produce this reflex condition, frequently a muscular one.

DR. HERMAN E. PEARSE said that from the standpoint of the general practitioner uterine troubles occasionally were associated with eye disorders, but generally do not cause them. The rest and the care incident to a uterine operation cures the neurasthenia from which the patient generally suffers and by this, not by operation *per se* recovery or improvement in cases where the eye was affected, was brought about.

DR. LANGSDALE jocularly remarked that hereafter he would send his gynecological patients to the eye specialist and his eye cases to the gynecologist.

DR. H. C. CROWELL spoke of the indefinite description generally had of such cases. He thought the prominent factor in many cases to be general neurasthenia and that rest and medication was followed by restoration.

DR. T. J. BEATTIE closed the discussion by further defending his position.

The second paper was one by Dr. John Punton, subject "Corea," with report of case.

Dr. Punton said "that while this was a very common subject it was one that could not be too frequently brought to the notice of the practitioners, and the prognosis given to the friends of the patient is too frequently ill guarded. Because it is a common disease it is frequently overlooked, or treated with indifference. There is a strong tendency among physicians to ignore common diseases, in view of the modern yearning for things new, strange and often mistaken and unreliable.

There is nothing new to present on the subject of corea. The profession stands practically where Sydenham stood when he wrote his masterly essay years ago. The pathology of the disease is unknown. Even the microscope is unavailing in unraveling the mystery surrounding it. Whatever treatment is adopted is largely imperic and tentative. He then gave the various classifications recognized by standard authorities in treating this disease, and presented a case of Sydenham's corea, with cardiac complications. The case was a girl of fourteen years of age, who had corea two years ago. This was her second attack, commencing three months ago. During these three months she had been under the ordinary arsenic treatment without results. The patient presented endocarditis with valvular changes and enlargement of the heart. She gave no history of rheumatism, and the doctor stated that rheumatism as a causative factor in corea was largely overestimated. He found that the experience of other physicians in clinical practice to coincide with his own. In his clinic he had not seen rheumatism play the prominent part it was supposed to play. As to the cardiac complications, they were usually a sequel or an accompaniment and seldom or never a cause. Fright frequently causes corea in nervous children, which may be permanent. As to treatment, he referred this topic to the society for discussion.

DR. J. H. THOMPSON said that he also had seen one case of this kind. Dr. Thompson alluded to the influence of fright, rheumatism and endocarditis.

DR. B. E. FRYER mentioned the causation theory of minute embolli in the medulla. He also called attention to eye strain as a cause.

DR. WAINWRIGHT favored the germ theory of these diseases and believed that the rheumatism and the chorea germ would soon be discovered.

DR. KYGER mentioned good results obtained from salicylate of sodium and anti-rheumatic treatment for preventing heart complications in the disease.

DR. W. J. FRICK wanted to know Dr. Punton's treatment.

DR. C. B. HARDIN thought that all chorea patients he had seen had neurasthe-

nia. He believed there was nerve degeneration. His observation was that arsenic had done good.

Dr. Murphy spoke of the affection of the inhibitory centers, and spoke of Wood's treatment by large doses of quinine. He alluded to twenty cases in New York in which quinine was successful in all but three cases. There was great tolerance of quinine.

DR. BEATTIE considered the important factor rest. He had put one patient to be and in two months he was well.

Dr. Bogie said that strychnine in large doses had proven effective

DR. DANNAKER said "Don't let these children mix with other children; keep them from the public; other children will be affected; it will be almost epidemic at times."

DR. CLEMENTS related a case where rest, sun and water baths had effectually cured a case.

At the next regular meeting the annual election of officers occupied the evening. The newly elected officers were President, Dr. Louis W. Luscher; Vice-President, Dr. H. O. Hannawalt; Secretary, Dr. J. B. Mitchell; Treasurer, C. A. Dannaker, M. D. The usual standing committees were appointed and reports of officers heard, from which it appears that the society is out of debt, and has about \$300 in its treasury.

The next regular meeting on October 24th, was entirely devoted to routine business, the discussion of the report of the Committee on Recommendations and the address of the incoming president, which was timely and of interest, principally from the recommendation that "this society exert itself to procure better care for those accidentally injured in the streets or about the city." W.L.C.

EDITORIAL NOTES.

VICARIOUS DIGESTION.—Continued investigation shows beyond doubt that the small intestines can and often do perform the work of the stomach for months and even for many years. In cases of gastric achylia in which no juices are secreted by the stomach at all, as demonstrated by repeated chemical tests, one to two hours after a test meal. The pain can be relieved by intra-gastric faradization, lavage, and proper diet and when the motor functions of the stomach are not involved the intestines digest the food perfectly, and the patient gains strength and weight. Conditions of gastric pain are perhaps the hardest known cases for diagnosis and require a breadth of view capable of taking in the entire economy and a thorough, accurate knowledge of the various chemical tests is absolutely necessary to a successful solution of the problems offered by the phenomena of stomach disorders. Especially is this true in cases of anacidity, hyperacidity and the condition above referred to, achylia. By proper means a positive diagnosis may be reached that will permit of such treatment, dietetic and otherwise that the intestines may vicariously perform the stomach's work for a long time, to the patient's infinite benefit.

THE EXTERNAL USE OF CHLORAL HYDRATE.—Dr. Broadnax uses it in toothache.

R Chloral hydrate - - -
 Camphor, - - -
 Carbolic acid, - - -
 Glycerine, - - - ss 5 (3j †).

Introduce a ball of cotton moistened with this mixture into the cavity of the tooth.
 In Earache.

R Chloral hydrate, - - -
 Camphor, - - -
 Carbolic acid, - - - ss 50 (gr. xijss)
 Castor oil, - - - 15 (3 iv).

Instill a few drops of this mixture previously warmed. — *College and Clinical Record.*

A NEW GLACTOGOGUE.—Physicians have long desired a safe reliable drug which when administered to a mother in good condition would increase the flow of milk without injuring the quality of it. The *New York Medical Record* tells of some experiments by Dr. Grinewitch with many drugs, from which he concludes that the most efficient glactogogue is the common goat's rue, *galega officinalis*. He gives a dram of the tincture three times a day. The next drug in importance is the common stinging nettle from which he prepares a tincture and administers from two hundred and fifty to five hundred drops per day.

NAPOLÉON'S FAVORITE PRESCRIPTION.—Dr. Charles B. Williams tells in the *Medical and Surgical Reporter* that Napoleon's favorite remedy for bronchitis and difficult breathing was:

R Pulv. ipecac - - - gr. xxx
 Pulv. scillæ - - - } ss gr. xl
 Pulv. ammonia - - -
 M. ft. massa; et. div. in pillulæ, No. 35.
 Sig. 2 pills night and morning.

APPOINTED CONSUL—The following clipping taken from the *Kansas City Journal* explains itself. Dr. Heath is an acquaintance of the editor and has long ago promised to write something of Bolivia and Central South America for the *INDEX*. Since his new honors have fallen upon him we trust he will do so. He has in his possession some interesting, romantic and valuable information which we hope he will give us. This is the item referred to.

"Dr. Edwin R. Heath, who has offices in the Rialto Building, has been appointed Bolivian consul for Kansas City and Missouri. Dr. Heath received a letter from

Mariano Baptiste, president of the republic of Bolivia, last Thursday, notifying him of his appointment. Accompanying the letter were official credentials from the secretary of state of the republic.

Although he will serve as consul for Bolivia, Dr. Heath is an American. Wisconsin is his native state. He spent twelve years prior to 1881 in South America, however, and the majority of the time was passed in Bolivia, making scientific explorations of the country. In 1879-'80-'81 he passed his time in exploring the River Beni, and discovered the River Madre de Dios, and a large tributary which has since been named Rio Heath, in honor of him.

Since leaving Bolivia Dr. Heath has kept in touch with the country and it is on this account that he was appointed the country's representative. He says that he will make himself a bureau of information for American Merchants, who wish to establish trade relations with Bolivia, or Bolivians who wish to deal with Kansas City merchants. Dr. Heath also says that steps are now being taken to rebuild the Madeira & Mamore railway in South America, and that steamboats are to be placed on the five large rivers that form the Madeira, which afterwards empties into the Amazon. This will make a forty days' communication with the diamond fields of Motto Grosso, Brazil; the sugar country of Santa Cruz, Bolivia; the mineral regions of Cochabamba and La Pas, Bolivia. and Cuzco, Peru. As it now takes from three to six months to reach these places, the Bolivian government thought that in view of the increased facilities for traveling, it might be well to have the country represented in various parts of the civilized world."

Bolivia has an honest, courteous, gentleman for its representative here, and parties desiring to ask concerning that country may safely trust his information.

THE OLD-FASHIONED FIREPLACE.

How dear to my heart are the days of my childhood,
 When there were no coal-gas stoves to rouse a man's ire,
 When the hickory back-log, brought in from the wildwood,
 Gave out the bright heat of the old-fashioned fire!
 How it crackled and sparkled, and fluttered and brightened!
 How nice it all seemed when it's put into rhyme!
 Yet, to tell the plain truth, to our youth unenlightened,
 You couldn't warm more than one side at a time.

Ah, the old-fashioned fireplace, the roaring old fireplace!
 How brightly it glowed with its sparkle and shine!
 How it warmed up your shins to points of real torture.
 While the cold winter breezes played tag on your spine!

—*Indianapolis Journal*—*Practical Medicine*

Yes, indeed;
 And when from a day's rabbit hunting returning
 We laid our wet shoes the hot embers before,
 And placed our yarn mittens, not thinking of burning
 Smoothly to dry on the old oaken floor
 Ah! then how the "hickory backlog" and forestick
 Blazed up in a fiendish "red-hot scorching way."
 Devoured our shoes and our mittens instant
 And left us to wear our big brother's next day.

Oh, yes! we've been there; had the ague before one—roasted corn and spare ribs before one, and baked corn bread in a Dutch oven. We appreciate the "one side at a time" picture.

THE ABSORPTION OF FERRATIN.—Marfori (*Therapeutische Monatshfte*, March 10, 1895,—*Univ. Medical Magazine*, Sept. 1895), states that Ferratin differs from other preparations of iron in being readily assimilated, and in being identical with a form of iron naturally found in the liver and other organs. The quantity of ferraatin ab-

sorbed will depend on the condition of the gastro-intestinal tract. The greater its decomposition in the stomach and bowel, the less the absorption. The sulphuretted hydrogen in the intestine decomposes ferratin. Marfori found that after the use of saline purges, which disinfected the bowel, 13.7 to 41.68 per cent. of the ferratin was absorbed. Schmiedeberg believes that under ordinary conditions only a small amount of ferratin is absorbed. Marfori performed the following experiment on three dogs to determine the amount of ferratin absorbed. After the bowel had been emptied by purgatives, the animal was placed on an exclusive milk diet, and after several days ferratin was administered. The lower bowel was then emptied by enema. To the first dog 140 milligrammes of ferratin were given; 104 milligrammes were recovered from the stomach and bowel, the amount assimilated being 36 milligrammes, or 25 per cent. To the second dog 91 milligrammes were administered; 81 milligrammes were found in the stomach and bowel, the amount absorbed being 10 milligrammes, or 10.9 per cent. To the third dog 185 milligrammes were given; 94 milligrammes were recovered, the amount absorbed being 41 milligrammes, or 30.3 per cent. From these experiments the writer believes that considerable quantity of ferratin may be absorbed even under ordinary circumstances.

These results, according to the writer, have been confirmed by Jacquet and Kundig. Fillippo de Fillippi asserts that ferratin, unlike other chalybeate preparations, is absorbed from the intestine *en masse*.

Ferratin, the iron component of food, is synthetically produced, and therapeutically employed it has yielded excellent results, enough to prompt favorable reports from Germain Sée, Fackler, Einhorn, Harold, and others.

LITTLE ITEMS.

Dr. E. Lanphear of 4301 Laclede Ave., St. Louis, visited Kansas City October 27th.

Dr. Robert W. Battey, of Georgia, is dead. He was one of the pioneers of abdominal surgery.

Dr. A. H. Cordier has a paper in a recent issue of the *Kansas Medical Journal*, of Topeka, subject "Sarcoma of the Ovary."

Dr. H. G. Welsh has removed from Sterling, Kansas, to Hutchinson, Kansas, in order to obtain a larger field for surgical practice.

"The pleasantest way to take cod-liver oil," says an old gourmand, "is to fatten pigeons with it, and then eat the pigeons."—*Tid-Bits*.

Iodide of potassium added to ammonium chloride cough mixtures increases the secretion and relieves the hard cough in sub-acute bronchitis.

Poultices are valuable aids, not so much on account of the material of which they are made, but because they retain the heat for a long time.

Parke, Davis & Co., have placed a supply of antitoxin in Hugo Eysell's Pharmacy where it can be obtained at any time upon letter, telephone or telegraph order.

Dr. F. Holmes Wiggins, of New York, urges laparotomy for perforation in typhoid fever, resecting the bowel and using a Murphy button for a prompt anastomosis.

Drs. J. D. Griffith, T. B. Thrush, John Punton, and other Kansas City doctors were in Emporia last week attending the session of the Lyon County Medical Society.

The *American Journal of Surgery and Gynecology* has been moved to St. Louis, and Dr. Emory Lanphear, formerly editor of the *MEDICAL INDEX* assumes editorial charge.

Dr. Sims Woodhead, from an experience of 2,000 cases, supports the antitoxin treatment of diphtheria, not only in the disease, but also as a prophylactic in those exposed,

Dr. J. W. Kyger reports another death from tetanus. When can our bacteriologists perfect and place within our reach the anti-tetanic serum? It is at present available only in New York and Baltimore.

A male nurse in the St. Louis City Hospital caused the death of a patient by giving a spoonful of corrosive sublimate for a dose of epsom salts by mistake. Another patient was poisoned but recovered.

The *New York Medical Times* says that whenever there is a history of flooding, one-sixtieth of a grain of strychnia should be given three times a day for a period of from four to six weeks before the time of labor.

In pigmentary diseases of the skin, such as lentigo and chloasma, which are so often encountered upon the face, and which are so obnoxious to the female sex, Dr. Cantrell advises the use of mercuric chlorid in watery solution.

Dr. T. A. Reamy, of Cincinnati, says that nothing can be more striking than the promptness with which puerperal convulsions are arrested as soon as *veratrum viride* has had time to act upon the heart and vaso-motor system.

Dr. Byron Robinson has been "measuring intestines" and announces that the small intestine varies greatly in length in various human beings. The longest he found was 32 feet; shortest 10½ feet and the average was 21 feet.

Dr. John W. Perkins, Senior Surgeon to St. Margaret's Hospital and Surgeon to the Union Pacific and Santa Fe Railway systems at this point attended the recent meeting of the American Academy of Railway Surgeons at Chicago.

The Northern Kansas Medical Society held its twelfth annual meeting at Seneca, Kas., November 7th, 1895. Among the papers, we notice one by our own Doctor Binnie, Professor of Surgical Pathology, Kansas City Medical College.

Dr. J. D. Griffith, Surgeon to St. Joseph's Hospital, and Professor of Surgery in Kansas City Medical College, sends us an interesting clinical lecture for publication in the December number. Dr. Griffith's semi-weekly clinic on surgery is one of the largest purely surgical clinics in the west.

Dr. Leonard Freeman, of Denver, Col., reports a case in the *Medical News*, (Philadelphia) of typhoid luxation of the hip and gives an excellent dissertation upon this unfortunate complication. His case was one of some six weeks duration and resulted in cure and restoration of function of the limb.

Miss Winifred Wilson, daughter of Dr. C. M. Wilson, of Washington, Ohio, was recently united in marriage to Mr. Wert Shoop. The young couple will make their future home in Kansas City. Both are of high social position in their home and will be welcomed among us. The INDEX extends its congratulation.

Dr. C. W. Tyree, one of our leading oculist has a series of cases of "cross eye" cases recorded which will appear in an early number of the INDEX. Some have been cured by operation and some by proper adjustment of glasses. The doctor's immense clinical, private and hospital practice gives him such a varied field of observation that his reports are of special value.

Dr. G. O. Coffin, the energetic city physician of Kansas City has perfected plans for a new and modern operating room for our city hospital. It will be a most excellent one and in keeping with the beautiful new building now approaching completion. We shall be proud of our hospital in 1896 and must thank Dr. Coffin for much of the improvement, with a generous share reserved for our progressive mayor.

The American Academy of Railway Surgeons at their annual meeting elected the following officers: President, Dr. John E. Owens, Chicago; first vice-president, Dr. L. E. Lemen, Denver, Colo.; second vice-president, Dr. F. H. Peck, Clinton, N. Y.; secretary, Dr. Webb J. Kelly, Galion, Ohio; treasurer, C. B. Kibler, Corry, Pa.; editor, Dr. R. Harvey Reed, Columbus, Ohio. Place of meeting, Chicago, September, 1896.

It is reported that the receipts of the *British Medical Journal* for last year were \$176,000, while the expenses were \$150,000, leaving a balance to the credit side of the ledger of \$26,000, which raises the total assets over the liabilities to exceed \$279,000; yet the *British Medical Journal* carries advertisements of proprietary medicines, and notwithstanding this it seems to succeed right well financially.—*Columbus (Ohio) Medical Journal*.

Never pass a sound into the uterus without first demanding a full history of menstruation; attention to this rule will often prevent tendering the designing patient a cheap abortion. Even with a clear history, remember the rule of the elder Goodell: "Cervix hard as the tip of your nose, no pregnancy exists; cervix soft as your lips, pregnancy almost certain to exist."—*Canadian Medical Review*.

Dr. Frank R. Smiley, Lecturer on Anatomy in the Kansas City Medical College, has taken charge of the clinical teaching of Genito-urinary Surgery and has already distinguished himself in that direction. The doctor spent the past summer and fall in the east pursuing special study in the line of genito-urinary surgery under eminent teachers. He publishes in the *Kansas City Medical Record*, for October, an excellent paper on "Suprapubic Cystotomy in an Obscure Case of Bladder Trouble."

The medical journals are freely circulating the statement that a child in Germany (strange how these foreign items live and thrive) had untoward symptoms from the use of antitoxin for diphtheria. The article is always headed "One of the Dangers of Antitoxine Injections." The truth of the matter is this. The case in point received sixteen hundred antitoxin units (about one and two-thirds bottles) inside of twenty-four hours. As one thousand units is a full dose for a severe case and as the case in point was "mild" and the patient but four years old the absurdity of the article becomes apparent. There is no valid objection to the use of antitoxin and every reason for its employment, but not in over-doses or carelessly administered.

The Legislative Assembly of the Indian Territory, we are informed, has granted power to the commissioners of any county in the Territory, upon their discretion, to send any chronic or habitual drunkard to an institution for the cure of inebriety, provided; that he shall be the head of a family; be unable to bear the financial burden himself and agree in writing to obey the rules of the institution; the institution must be in the Territory; the commissioners must not spend more than \$160.00 on any single case and not more than five cases shall be sent from any one county in a month. And thus does the Indian Territory show its wisdom by spending a few hundred dollars to cure inebriety and forestall crime rather than to care for the man and family after he has become pauperized by drink, or spend thousands in convicting the man of crime after he has committed it. We cite this matter to our eastern exchanges as a sample of the progressive class of people in the Territory.

READING NOTICES.

STARVATION.—If your patient is suffering from impaired digestion, or, in other words, starving, not from lack of food, but from lack of digestion, then prescribe Seng, two teaspoonfuls before each meal.

Prof. Nicholas Senn, of Chicago, says: "The ordinary filthy poultice of flax-seed, slippery-elm and bread and milk has no place among the resources of the aseptic surgeon. The common poultice is a hot-bed for bacteria, and, as such, should be discarded." Physicians appreciating this truth are now prescribing Antiphlogistine in all local affections, due to pathogenic micro-organisms, with marvelous results. Because of its efficiency and comparative permanency—lasting 24 hours thus permitting rest and quietude upon the part of the patient, it is fast supplanting all local applications in pneumonia, pleurisy, peritonitis, pelvic affections, etc. In the early stages of these diseases, it is regarded as a specific when properly applied—at least one-eighth of an inch thick and well over and beyond affected part or parts.

CAMPHO-PHENIQUE POWDER.—In lacerated and contused wounds it acts like magic. Dr. J. W. Charles, of Kansas City, Kansas, speaking of Campho-Phenique Powder, says: "I treated a boy of fifteen, recently, with a sample of Campho-Phenique Powder so kindly sent me, with the utmost satisfaction. He was brought to my office in an unconscious condition, from a very severe lacerated and contused wound of the scalp, made by a flying timber blown from a mill. I dressed the wound with Campho-Phenique Powder, and must say that I never had a dressing of any description to act so satisfactory; although terribly bruised and torn, the wound healed without the formation of pus, behaving like a clean incision in this respect. The Powder acted like a charm; and since, in several other minor cases it has preserved its past reputation. Its cheapness, absence of unpleasant odor and above all, its certainty as an antiseptic, all combine to make it the ideal antiseptic dressing."

I can say that Peacock's Bromides will do all that is claimed for it, it is much more active and certain than the commercial salts.

Grand Rapids, Mich.

G. H. CHAPPELL, M. D.

RESPONSIBILITY FOR UNTOWARD ACTION.—With the characteristic pithy and trenchant utterances which "hews to the line letting the chips fall where they may" and which marks all of his sayings, Dr. Frank Kraft, 57 Bell Avenue, Cleveland, Ohio, Professor of Materia Medica, Cleveland Medical College, writes: "The professional market seems to be filled with substitutes for the original and ever favorite antikamnia; all warranted to do what the antikamnia has succeeded, by hard work and expenditure of much money, in establishing; all of these nefarious products masking under some name partly modeled after the antikamnia pattern, beginning with an A. and warranted to still pain, etc., etc., are base imitations of antikamnia. They may be, and perhaps are, coal tar products, but they can not take the place of antikamnia; this was the first product and made a success because of its merit; hence the host of imitators. Insist upon getting the original antikamnia, and caution your druggist that if he practices any substitution you will not only decline further to deal with him but hold him personally responsible for any untoward action of his substituted remedy."

ACUTE CYSTITIS.—Resulting from gonorrhoea and presenting symptoms of distress and pain over pubes, frequent and urgent inclination to micturate, urine cloudy and depositing slight amount of mucus on standing.

CHRONIC CYSTITIS.—Resulting from enlarged prostate, retained or altered urine, or from gout or nervous derangement—mucus or muco-pus rendering the urine more or less cloudy or opaque.

TREATMENT.—In addition to the mechanical treatment, usually essential in the management of disorders of this class, the administration of Lambert's Lithiated Hydrangea is often of the greatest service. A practitioner of wide experience says:—"I have used Lambert's Lithiated Hydrangea on various persons affected with diverse and painful manifestations of chronic rheumatism, gout, lithiasis-urica, nephritic calculus and functional disturbances of the renal system, with excellent results and I consider it a valuable remedy for normalizing the renal function, for promoting the active elimination of uric acid and to calm the congestive conditions of the kidneys and of the urinary mucous membrane."

VIN MARIANA AND THE DISPENSARY LAW.—The Dispensary law in South Carolina has of late been so rigidly enforced that many druggists were afraid to sell even medicinal preparations containing wine as one of the constituent parts. This seriously interfered with the sales of the well known tonic Vin Mariane throughout South Carolina, and the proprietors of that famous specialty made vigorous representations to the Governor on the subject. As a result of these representations, Vin Mariana has been specially exempted from the workings of the Dispensary law, as is shown by the following letter received by Messrs. Marian & Co., from Gov. Evans: (Copy.)

STATE OF SOUTH CAROLINA,
EXECUTIVE DEPARTMENT,
OFFICE STATE BOARD OF CONTROL.

COLUMBIA, S. C., Oct. 5, 1895.

MARIANA & Co., 52 West Fifteenth St., New York:

DEAR SIR:—In reply to your favor of 30th ult., Gov. Evans directs me to say that you have his permission to sell the Vin Mariana, and he will exempt it from seizure in the State when not sold as a beverage.

Respectfully,

W. W. HARRIS, Clerk, S. B. C.

VOMITING IN PREGNANCY TREATED WITH INGLUVIN.

(From the *Lancet*, July 26, 1876, page 145.)

TO THE EDITOR OF THE LANCET.

SIR:—Dr Kempe asks if other medical men have seen good results from the employment of "Ingluvin" in the Vomiting of Pregnancy. In two severe cases I have had to use it for a fortnight: but in ordinary cases, half a dozen powders of ten grains each; one taken half an hour before each meal, put a stop to the nausea. Even patients who have become quite thin from want of nourishment, due to the sickness, regain their flesh and appear quite well in about three weeks. One severe case at present under treatment has not vomited for a fortnight, but still feels nausea occasionally.

Yours faithfully,

West Hartlepool, July 15, 1879.

EUSTACE M. SWANWICK.

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WHOLE No. 192.

ORIGINAL ARTICLES.

BRAIN SURGERY.*

BY L. D. JACOBS, M. D., EMPORIA, KAS.

Mr. President and Members of the Society:

During the last three years the several committees on programme have assigned for me subjects which have been to me, personally, exceedingly agreeable.

I have discussed, with considerable care and study, the subjects of appendicitis, strangulated hernia and intestinal repair; and I have done this with much profit to myself and, I hope, with some benefit to the Society. No less agreeable, no less interesting, no less important, no less practical is the subject assigned to me for this evening.

Some of us have grown comparatively old in professional service. When such of us face about and take a retrospective gaze into the distant past and view the field of medicine as it was when we first entered it, conscious of its present prodigious development, we are startled at what little, in many respects, the wisest then knew. In pathology and surgery is this especially apparent. The progress of attainment in surgical procedure, during our professional lives, has been greater than the aggregated achievements of thousands of antecedent years. But the most marvelous, the most brilliant, the most daring achievements have been accomplished within the professional observation and experience of the youngest of us. Particularly is this true of brain surgery. Here the recent labors of the physiologist, the pathologist and the clinical observer have enabled the surgeon to enter the cranial cavity with as much intelligence and safety and certainty as the compass and chart enable the mariner to traverse the sea.

I am fortunate in this subject, because we are all equally interested in it;

*Read before the Lyon County, (Kansas), Medical Society, November 5th, 1895.

whether we be surgeons or physicians or ophthalmologists or neurologists, we must work together—the one is dependent upon the other—we are all equally responsible in brain surgery.

Twenty-eight years ago, I was called to see a young man suffering with epilepsy and with occasional homicidal impulses. When a child he had sustained a fracture of the cranium and there remained a deep depression in one of the parietal regions. I was called in the case with Dr. Trueworthy to consider the propriety of operation. The case was undoubtedly traumatic in its origin, and the epilepsy, in our opinion, was from irritation, or adventitious formation from depressed bone. An operation might remove the trouble. The young man at the time was well, was willing to undergo an operation, provided there should be no considerable risk incurred to life, otherwise he objected. There was no way of deciding the probable risk but by the surgical authorities and by tabulated statistics of similar procedures. Gross was then the acknowledged authority. In his work on surgery, when discussing operative procedure for epilepsy, he says: "I have myself had occasion to perform the operation four times, with the effect of one cure and three deaths; and I have witnessed its execution in three other cases, all of which terminated fatally. Nearly all of the patients perished within the first week from inflammation of the brain and its envelope, evidently induced, not by any injuries inflicted upon these structures in the operations, but by the disturbance of the cerebral circulation consequent upon the removal of the depressed bone. The event in question occurred in all the cases notwithstanding the most thorough preparation of the system, and the most assiduous attention during the after treatment." The most favorable statistics, at that time, as to mortality in operating for epilepsy, were by Dr. John S. Billings, giving an analysis of 62 cases; 16 of which died—a mortality of over 25 per cent. There might be, in this case some cicatricial thickening of the dura, some neoplastic formation, some cystic condition from the presence of depressed bone or penetration of a spicula of the inner table. I had studied H. H. Smith's surgery. He was my professor at the University of Pennsylvania, and in his work, in the chapter on operations upon the bones of the cranium, he says: "If on perforating the bones" blood is found to be diffused outside of the dura mater, careful manipulation will enable the operator to turn it out without injuring the membrane, as this is generally depressed and separated from the inner table of the skull by effusion. If however the blood is evidently beneath the membrane, it may be questionable whether the danger from its puncture is not greater than that which would ensue if the effusions were left to nature. The judgment of the surgeon based upon the urgent character of the symptoms, can alone decide this point. Patients have recovered when the membrane has been punctured and even considerably lacerated; yet no judicious operator would deem such a result a precedent, except in cases of great emergency." Now in the face of such teaching, I could not afford to risk an operation that might necessitate an injury to the dura, and, confronted by the terrible experience in the practice of the foremost American surgeon, I did not even dare remove a button of this man's cranium. I looked wise, shook my head and decided

against an operation; and it is well that I so decided because if I had operated, he would in all probability have died from the consequence of surgical procedure; in other words, I would have killed him. At all events, he would not have had any more chance to recover from an operation by me than if done by Prof. Gross, which would have been 15 to 100. To-day this man's chances for recovery from the operation, even if the dura were involved and a cyst existed from penetrating spicula, would be 93 to 7, (Starr Brain Surgery gives mortality 7 per cent.) and his chances for recovery from mere trephining would have been from the year 1879 to 1888, 97 to 3, and from 1888 to present date they would be absolutely 100 to zero—no risk whatever from the operation of trephining. Verily truth does seem stranger than fiction; and yet, in the light of present intelligence, this apparently marvelous achievement is only natural, not mysterious; simple, not complex; it is only the inevitable result of an easily produced condition—and that condition is *asepsis*; not however semi-*asepsis* or a sort of an appearance of an attempt at *asepsis*. *Asepsis* is an unqualified term, expressing a definite condition; it admits of no degrees of comparison or qualifying adjectives. Gentlemen, when we fully and appreciatingly, and practically understand the term *asepsis*, then shall we wield a sceptre more marvelous and potential than the enchanter's wand, then can we say in surgery to that mountain, "be thou removed hence and cast into the sea" and it shall be done.

I must accentuate this term, because it is upon the condition implied in the literal meaning of the term *asepsis* that the colossal superstructure of modern surgical achievement rests. *Asepsis* is the first and the last condition to be accomplished in every operative procedure in brain surgery.

To do this the head must be entirely shaved; the scalp must then be thoroughly washed and scrubbed, using a brush, with soap and water; the head must then be washed with ether, rubbing the scalp gently but thoroughly, then washed with a solution of corrosive sublimate 1 to 1000 in boiled water, then dried with a towel which has been sterilized by boiling in sublimate solution 1 to 2000 and been dried and ironed on sterilized cloth; and, finally, the head must be covered by a piece of moist gauze, of seven or eight thicknesses, previously boiled in sublimate solution 1 to 2000, and this pad of gauze must be retained to the scalp by means of an applied sterilized roller. This is usually done the evening before the day of the operation. If not possible to do so, it should be done as related and there maintained until other preparations for the operation are completed. The instruments, needles, ligatures, (except catgut) drainage tubes and gauze dressings should be boiled. Iodoform and iodoform gauze can be sterilized by putting them in a glass tube or bottle and then boiling the tube or bottle. The hands and arms of the operator and of all assistants should be thoroughly washed with soap and water, using a brush; then washed with alcohol for sometime, then in a solution of corrosive sublimate. When ready to proceed with the operation, the head should be undone and washed again with corrosive sublimate water and again with ether or alcohol and finally with boiled filtered water. Sterilized towels should have been placed about the head and chest, so that no instru-

ment or material used in operating shall possibly come in contact with anything unsterilized. The operator and assistants should now again wash their hands in sublimate water and then rinse them in boiled water. It is understood that the instruments and other material have been placed in sterilized plates or trays. The operator and assistants must henceforth not touch anything that is unsterilized until after the completion of the operation and dressing. Re-adjusting of one's glasses, scratching one's face or nose, or anything of that sort, is a violation of the principles of aseptic technique—and, if it should be unavoidable, the hands must again be washed in sublimate water and rinsed in boiled water. In operations on the skull for injury, the wound must be cleansed antiseptically and the head prepared otherwise practically the same as already detailed. In any and all the proceedings that I may refer to in this paper, in cleaning wounds, trephining, suturing, etc., it is to be presumed that the patients and instruments and dressings and the surgeon's hands, etc., are in the above described aseptic condition.

During the same year in which I saw the referred to case of epilepsy—twenty-eight years ago—I treated a most interesting case of brain disease. It was of a young man 21 years old. He had been suffering with headaches for sometime previously. At the time of my first visit, he was apparently having an attack of dysentery and malarial fever. From this condition he soon recovered; but a severe headache remained. It was most intense in the fronto-parietal region. (I do not remember which side). Under treatment it seemed for awhile to ameliorate, but only for a short time. The pains persistently became more and more intense. After a time he became despondent, morose and irritable; then he became superose. Thus he progressed for months. At length there were convulsive seizures, and conjugate deviation of the eyes; vision became impaired, aphasia and hemiplegia followed. At last came coma and death. There was no history of trauma, none of ear trouble; there had been no suddenness of attack; it could not be encephalitis. I became strongly impressed with the idea of tumor, and gave that as my diagnosis of the case; and to verify this diagnosis, I requested an autopsy which was granted. Drs. Hibben, Gordon, Trueworthy and Moore were present and assisted in the post-mortem. I shall never forget my feelings of suspense and expectancy—mingled now with surprise and disappointment, now with chagrin and mortification, now with exultancy and triumph—as the post-mortem operation proceeded. On removing the calvarium, the dura and brain appeared normal. On slicing off the upper cortex into the white substance, the brain still appeared normal. I keenly felt the intended wound when one of the physicians—and I have long ago forgiven him, though I shall never forget the stab—said with the air of a profound pathologist and the squint and wink of a Falstaff: "Why gentlemen, this man's brain is all right; I never saw a finer brain in my life." But the next slice brought us upon a tumor—a large tumor, a tumor as large as a small orange. It was apparently fibro-plastic in its character, firm in its consistence and thinly encapsulated. How eagerly I seized it, how I valued it, and how I again and again held it in triumph before the gaze of the discomfited doctor. For more than fifteen

years I kept that tumor, hermetically sealed in alcohol, but then, in some way, I know not how, it disappeared.

My purpose in relating this case is to remind you of the meager means we possessed at that time for diagnosing such cerebral troubles. The crossed action—decussation—of nerves, indicating a lesion on opposite side from the hemiplegia, was about the only focal sign we possessed. My diagnosis proved to be accurate, but, in reality, it was but a conjecture founded upon history, mode of progress and the exclusion of other diseases. To-day the diagnosis of cerebral tumor is comparatively easy, and even its precise location can in many instances be accurately determined. The physiologist has discovered that the function of motion, sensation and the special senses reside in certain areas of the cortex of the brain and has succeeded in definitely mapping out their locations. When these areas are affected by pathologic or traumatic conditions, the corresponding functions are disturbed. It is from this knowledge that the present advancement of brain surgery has come. Without this knowledge few brain operations could be made, because diagnosis of the situation of the lesion could not be had. Presuming that it will not be an offense to your intelligence, I desire to call your attention to several diagrams that I have prepared for the purpose of making, by delineation, a passing resume of a few of the more important facts concerning cerebral localization.

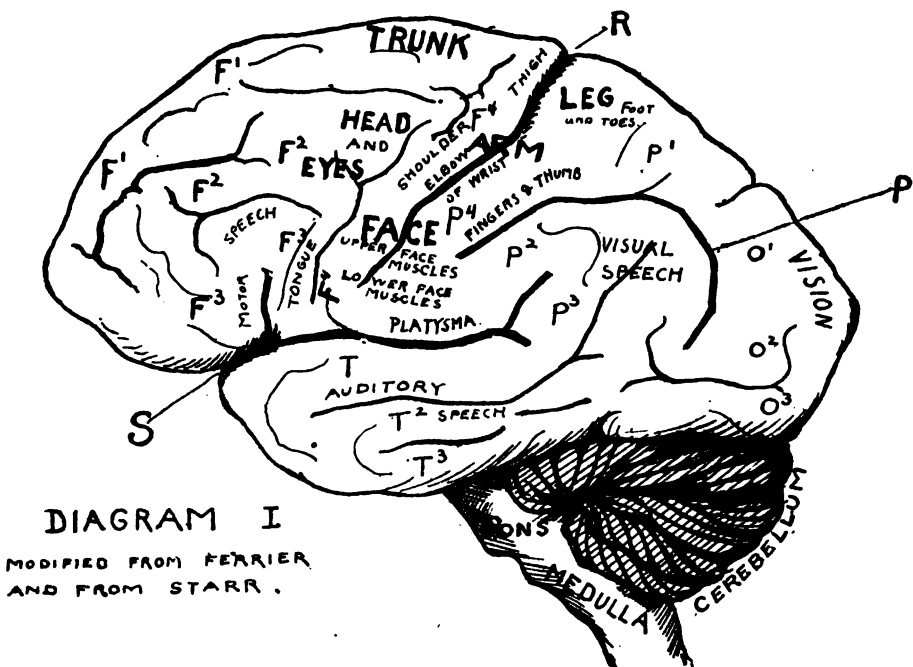


Diagram 1 represents the outer surface of the left hemisphere. This surface, as you well know, is intersected or divided by sulci or fissures into convolutions. F^1 is the superior, F^2 the middle, and F^3 the inferior frontal convolution. F^4 is the ascending frontal or anterior central convolution; and P^4 is the ascending parietal or posterior

central convolution. Between the two last named convolutions lies the fissure of Rolando.

P¹, P², P³ are the parietal convolutions and T¹, T², T³ the temporal, and O¹, O², O³ the occipital convolutions. S. is the fissure of Sylvius, and P the parieto-occipital fissure.

Situated along and on either side of the fissure of Rolando is the sensorimotor area. It includes, as you perceive, the cortex of the anterior and posterior central convolutions, and adjacent cortex in front and behind these convolutions. The upper third of this area controls the movements of the leg, the middle third, the movements of the arm and the lower third, the movements of the face and throat. You will also notice, as remarked by Starr, "that the parts susceptible of finest and most delicate movements, those directed by the most acute sensations, the lips, the fingers, the toes, lie furthest back in the motor area, chiefly in the posterior central convolution." Thus in the leg region we have furthest posteriorly the toes and foot; then, over the fissure, the leg, and anterior to the fissure, the thigh, and still further anteriorly, the trunk. So in the middle region, in about the same order, are situated the fingers and thumb, then the wrist and elbow at the fissure, and, anterior to the fissure, the arm, then the shoulder. Still further, anteriorly, is the area of the head and eyes. "Impulses starting from this area produce conjugate movements of these parts towards the opposite side." (Starr.) The speech area, as you see, is situated on the lower and posterior part of the third frontal convolution. You will observe that it lies around the vertical ramus of the fissure of Sylvius. Injury here produces motor aphasia. Here, in the upper and middle temporal convolutions, is the auditory speech area; and below under the third temporal convolution are the smell and taste areas. The areas of smell and taste and the auditory area are, it is said, so intimately connected with their fellows on opposite side, that their functions are rarely ever destroyed on one side only. Here, in the second and third (P² and P³) parietal convolutions is the visual speech area. Its destruction would destroy the power of recognition of language by sight, as reading. The area of vision is situated here (O², O³) at the lower cortical portion of the occipital lobe. You know if you cut down here, you will find a deltoid shaped convolution—the cuneus. This is the seat where impressions, focused upon the retina, are received. Destroy this portion of the brain and you destroy sight, although the eyes otherwise may be perfect. When one side is affected half vision in both eyes is produced—a condition called hemianopsia.

DIAGRAM II.

This diagram represents how this is done. You perceive this is a horizontal section of the brain. This (A) is the sight area; this (B) the optic track; this (C) the commissure; this (D) the optic nerves and this (E) the eyes. The dotted lines and dashes represent the course of nerves from each cortical side. An injury, for instance, on left sight area ('O') would produce hemianopsia in the right half of both eyes—temporal half of right eye and nasal half of left eye. That is, if you held your hand edgewise before a person so affected, (he shutting one eye) then place a card on one side and then

on the other side of your hand, asking him to see both hand and card, he would be unable to see the card when placed on the side of your hand corresponding with the right side of his eyes. He would have right (homonymous) hemianopsia. The blind half of retina is really on left side. The focal symptoms must not be interpreted too literally. For instance, whilst in hemianopsia the point of lesion might be in the occipito-cortical region, yet it might also be deep in the brain in the optic track. You see a lesion here (in optic track, 'O') would produce the same hemianopsia as here in the visual area ('O'). And so also as to the sensori-motor area or any other area, the nerves projected from these areas through the white substance and the *corpus callosum* and *pons varolii* and the medulla, etc., may be anywhere in their course involved in lesion or encroached upon by disease, and similar symptoms would be produced as where the cortical area is only involved. But the symptoms would not stand out so distinctly. The multiplicity of symptoms and the history of the case would enable us largely to differentiate. It is said that monospasm and Jacksonian epilepsy always indicate cortical lesion. When we look at the first diagram, we at once see how important it is for us to locate upon the skull the fissures of Rolando and Sylvius and parieto-occipital fissure. When we have these landmarks, we can relatively locate the special areas.

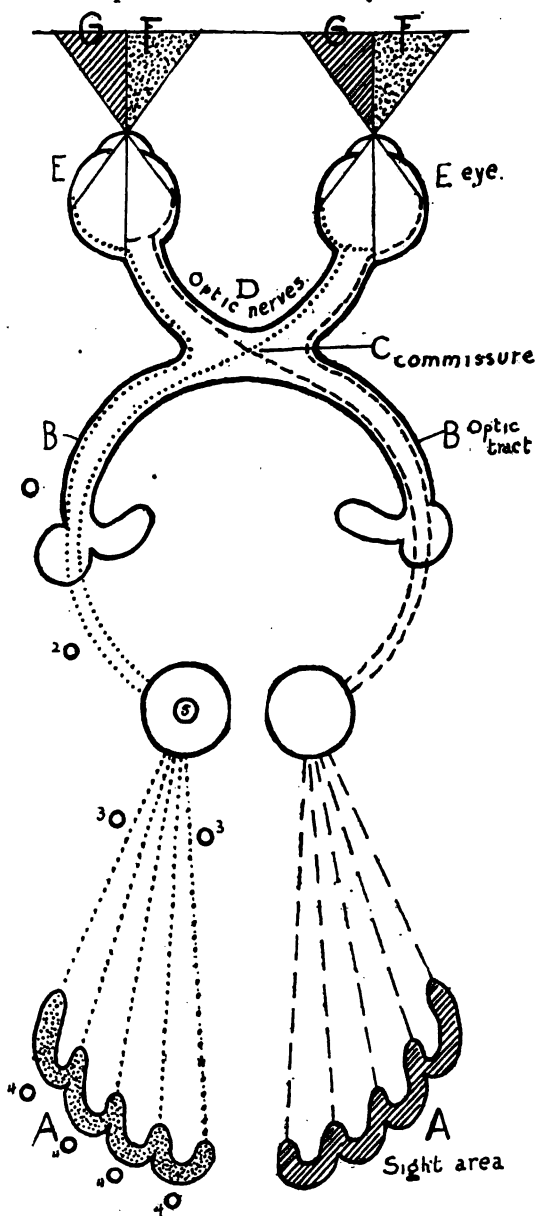


DIAGRAM II
FROM RANNEY

DIAGRAM III.

This diagram represents the lines corresponding to these fissures drawn

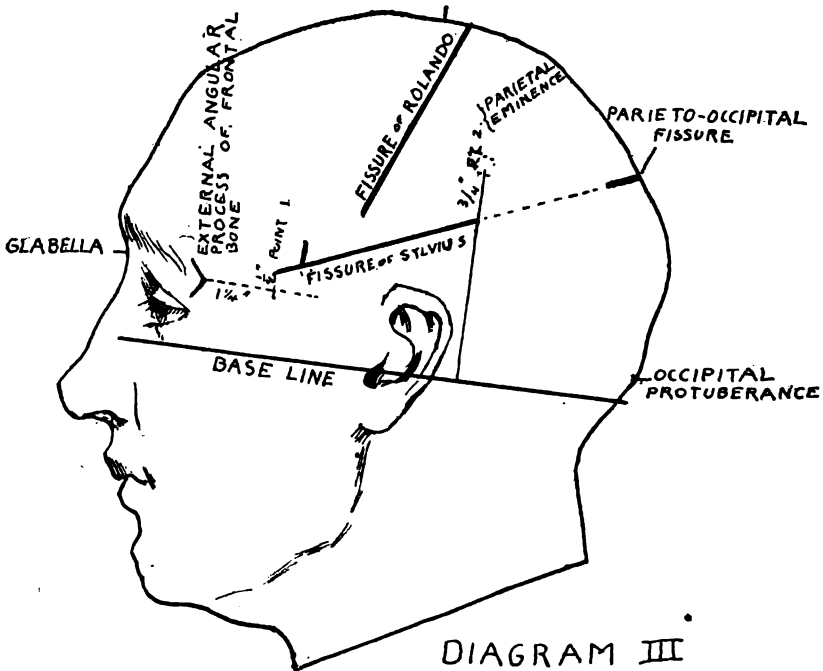
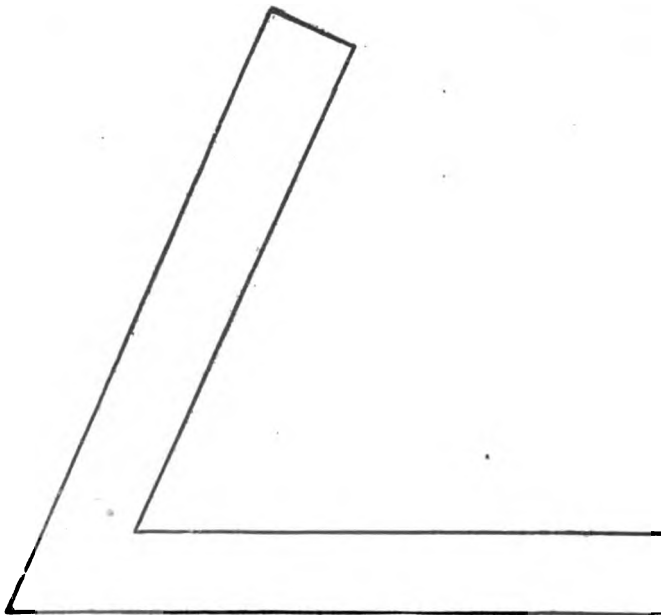


DIAGRAM III

upon the skull. They are made from Reed's method. To find the fissure of Rolando, draw a line from the root of the nose to the occipital protuberance



ANGLE OF SIXTY-SEVEN DEGREES.

over the top of the head and take a point one-half inch back of the middle of the distance of that line. This point will correspond to the upper end of the fissure. The fissure makes an angle of 67° with the median line just measured. If now we lay a piece of metal or paper, made in an angle of 67° with the apex of the angle at this point

and one side to correspond with the median line, the other limb of the metal angle will mark the fissure. It is about $3\frac{1}{2}$ " long.

To find the fissure of Sylvius, draw a base line from the lower margin of the orbit to the auditory meatus. Draw a second line parallel to the base line from the external angular process of the frontal bone backward one inch and a quarter ($1\frac{1}{4}$) and then measure upward one quarter of an inch ($\frac{1}{4}$): This gives point one. Find the most prominent point of the parietal eminence, and from this draw a line downward perpendicular to the base line, and on this take a point three-quarters of an inch ($\frac{3}{4}$) below the eminence: This gives point two. Join these two points and the line will be over the fissure of Sylvius. The vertical ramus of this fissure is two inches behind the external angular process of the parietal bone. The fissure of Sylvius is about four inches long.

To find the parieto-occipital fissure, continue the line of the fissure of Sylvius to the median line: At this juncture lies the fissure.

DIAGRAM IV.

This diagram simply represents to the eye the lines drawn and indicates the corresponding focal areas.

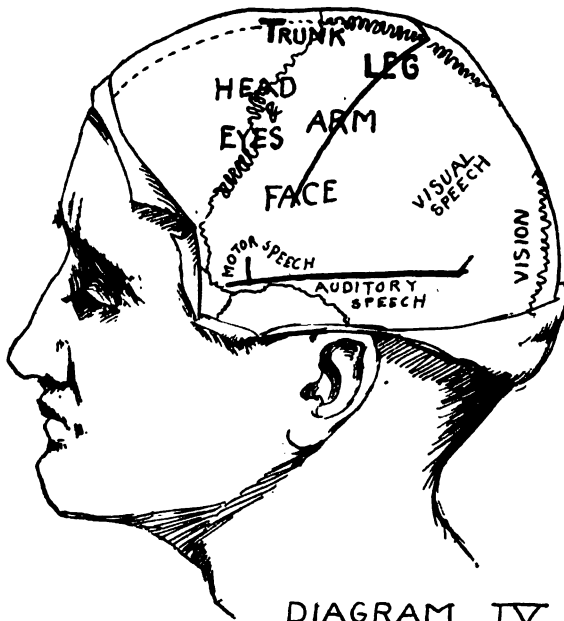


DIAGRAM IV

Now having made a hasty review of the more important facts concerning certain understood cortical areas, we more readily appreciate how an irritation or lesion of any of them produces temporary or permanent disturbance of the corresponding functions.

However, as I remarked in explaining the diagrams, we must not interpret too literally the focal symptoms. The nerves in their course, whether to or from these areas, may be involved in lesion or disease, immediately, or remote-

ly from pressure, and the resulting symptoms would be the same as if the particular area from which they come or to which they go were affected. We must remember also that there are portions of the brain, the cortical parts of which give, so far as we know, no focal symptoms: These are particularly the anterior portion of the frontal lobe, the temporo-sphenoidal lobe and parts of the occipital and parietal lobes. The ensemble of focal symptoms must be taken in determining their signification. With our present knowledge, we would not hesitate to operate for our case of epilepsy. If it were *grand mal* and without preceding focal indications, we would attempt its cure by removing the depressed bone and any thickened cicatricial tissue beneath it, if such existed. If it were *petit mal* with focal symptoms; for instance, local aura, mono- or hemi-spasm—so-called Jacksonian epilepsy—we would operate with more certainty of cure, but our operation would have to be made at the point indicated by the symptoms, regardless of the depression. I might, if space permitted, quote some interesting cases, in exemplification of this last statement from the literature, but you are undoubtedly familiar with many of them.

The operation of trephining for epilepsy is being done very frequently. Starr in his work on Brain Surgery, published in 1893, says: "The operation has been done over three hundred times in the last five years." The cases collected by himself number 42, with a result as follows: 13 cured, 11 improved, 15 not improved, 3 died. Of course, no one ever could think of operating for epilepsy, except perhaps in cases where depression of bone or like deformity existed, unless the point of cortical irritation, or focal area could be absolutely defined. Epilepsy, after all, is only a symptom—a symptomatic demonstration of disease or lesion, just like paralysis or anæsthesia; and the, so-called, Jacksonian epilepsy, like monoplegia, hemiplegia, hemianæsthesia, hemianopsia, etc., is a focal symptom, evidencing a local pathologic or traumatic condition. It is for the conditions, evidenced by the various localizing and other symptoms, that cerebral surgical operations are done. Among them stand most prominently tumor, abscess, hæmorrhagic clot, pachymeningitis, lepto-meningitis, and depressed fracture.

My case of tumor was probably unoperable, as it was situated deep in the centrum ovale and near the base of the brain; but at that time any cerebral tumor, of whatever kind or however situated, would have been unoperable and hopeless.

At that time no surgeon had ever dreamed of ever being able to enter the cranial cavity, guided by focal diagnosis, and remove a neoplasm. It was not until 1894, when Godlee deliberately planned and successfully executed the operation, that surgeons "became alive to the possible diagnostication and removal of brain tumor of which there was no external local appearance." Since then more than a hundred operations have been done and reported. Starr in his work (1893) gives 97 cases—81 of which were cerebral and 16 cerebellar—which includes all the cases operated upon and reported up to that time. Of these cases, there were 35 in which the tumor was not found; 3 in which it was found but not removed; 17 in which the tumor was removed

and the patient died; and 42 in which the tumor was removed and the patients recovered. 40 per cent. of all the cases operated upon recovered, and the percentage of recovery after successful localization and removal was 46 per cent.

I shall not attempt to give you the symptoms or diagnosis of brain tumor. That would be impossible. Each case requires careful study. But a persistent headache, constant stupor, convulsions, "paralysis in varying degrees," choked disk, attended with slow pulse and followed perhaps with hemianopsia and other focal symptoms, as aphasia, etc., ought to suggest to any physician the probability of tumor. It must not be forgotten that there are latent zones in the brain where a tumor may exist and give rise to no localizing symptoms, but only to headache, choked disk, stupor and convulsions. (Keen). Hemianopsia, choked disk and unsteady gait point to cerebellar location. Focal symptoms and, perhaps, local pain on percussion, are the means which enable us to localize the tumor.

Somewhat allied to tumor in its symptomatology is abscess. Abscess of the brain is not very uncommon. All of us have probably, at some time or other, recognized it by its symptomatic manifestations; and some of us, possibly, by operative procedure, have witnessed the pus. It originates most frequently from suppurative ear disease—more than 50 per cent. of the cases are reported as coming from this source—though it not unfrequently results from injury. The only treatment of avail is operative—usually trephining and drainage. Its symptoms arise from suppurative process, pressure and location. Tersely stated, they are fever, characterically septic, headache—general or local—intellectual apathy and focal disturbances according to the cortical areas encroached on or involved. The differential diagnosis must depend largely upon the history of the case and mode of development. The seat of abscess in traumatic cases is usually immediately beneath the place of injury, and it is usually caused by violence to the internal table of the skull or dura, or by sepsis introduced through the vascular and lymphatic vessels, passing from the scalp through the cranium. It may be extra or intra dural, or intra cephalic. In abscess from ear disease, the seat is most frequently in the temporo-sphenoidal region, and next frequently in the cerebellum. Barr, in 76 cases following ear disease, found 55 in the temporo-sphenoidal lobe, 13 in the cerebellum, 4 in both cerebrum and cerebellum, 2 in the pons and 1 in the peduncle.

When focal indications exist they are to be taken as reliable, and should be followed in electing a point for operating. I might relate a number of interesting cases of abscess of the brain, which have occurred in my observation and practice, but space will not permit. I will, however, for the purpose of emphasizing the importance of operative treatment refer to one. It was of E. A. S.—a man of about forty-five years old—under the treatment of Dr. Page. His history was that of ear disease. He had come to town at the suggestion of his physician and consulted Dr. Longenecker, about two weeks before the time of my visit. Dr. Longenecker has lately informed me that at the time of his examination of this case there was pain in the head,

in the region about the left ear, but no evidence of mastoid disease, nor any indications of suppurative otitis, although the man had had, at some previous time, an otorrhœa. However, the case gradually became worse. When I saw him with the attending physician, he was comatose, unable to speak and profoundly hemiplegic on right side. In a day or two he died. What ought to have been done in this case? As early as possible, the scalp ought to have been raised and a trephine (centre pin) applied $1\frac{1}{2}$ inches behind the external auditory meatus, at a point the same distance above Reed's base line. (Barker.) "This is just above and behind the junction of the petrous with the remaining portion of the temporal bone. A director passed downward, forward and inward would pass through the axis of the sphenotemporal lobe." (Keen.) There would have been, practically, no danger from the operation. The grooved director should have been pointed in various directions, if necessary, and when pus was found, with a knife, the abscess should have been opened, and the opening enlarged, if necessary, by carefully introducing the end of a hæmostatic forceps and gently opening the blades. (As a rule, in such cases, this operation should be preceded by trephining the mastoid as pus is often found there and the abscess may be drained.) Another point for trephining in such cases, as given by Keen, is three-quarters of an inch in front of the meatus and one and one-half inches above Reed's base line. It avoids the posterior meningeal artery, but, in penetrating the brain at this point, there is danger of wounding the middle cerebral artery. There is no hope for such cases outside of operation. They all die, and we ought to remember it in our practice. Keen, in commenting on this subject, says: "Hoffman, whose paper is the best authority on the subject I have found, gives a ghastly table of 102 fatal cases in which the diagnosis was established by a post-mortem examination, and its impressive lesson is but reinforced by the 10 additional cases diagnosticated during life. Four of these were observed by others, of which three recovered after operation; six are reported by himself of which five recovered after operation, one dying six weeks later from bronchitis. No other commentary as to absolute necessity for operation can be needed."

In operating for abscess, after having trephined, the dura having been incised, (unless the abscess is extra dural,) exploration should be carefully made with an exploring needle or grooved director. Aspiration with a hypodermic neele is said to be objectionable, as, by its suction, it damages the substance of the brain. When pus is found, a small incision should be made into the cavity and then, as I have already said, a hæmostatic forceps should be introduced and the blades carefully separated to sufficiently widen the opening. The cavity should be gently irrigated with a very mild solution of corrosive sublimate—1 to 8,000. A rubber drainage tube should be introduced and brought out through an opening in the flap and secured by a loop thread which has been passed through the scalp. The dressings should be the usual iodoform gauze, covered with corrosive sublimate gauze and cotton. The drainage tube should be gradually shortened as the cavity heals. When extra-dural abscess involves necrosis of bone, of course, the necrosed substance must be removed.

Most of you have probably seen intra-cranial hæmorrhage of traumatic

origin. The most typical case for operation that ever occurred in my experience, was that of a boy, who one week before had fallen and sustained a slight contusion on right parietal region. I will relate the case. Clinton H., *et.* 10, on the evening of June 5th, 1890, fell down the cellar stairs. at his home, striking the right side of his head against one of the steps. He was picked up in an unconscious condition. There was a small lacerated cut at the upper border of right ear, and a slight contusion of the scalp just a little above this point. Dr. Moore was called and dressed the wound. The boy remained unconscious most of the night, but the next day was doing well. In two days he had so much improved that he was permitted to go out, and no thought was entertained by either his parents or physician of impending danger. On the morning of the seventh day, he did not appear so well, and talked with difficulty. Soon he was not able to express his ideas in words; then there was twitching and spasms of left arm, followed by paralysis; the left leg also became affected; there were convulsive seizures, involving principally the left side. Thus he progressively grew worse. Late in the night, I was called to the case in consultation with Dr. Moore. The boy was now comatose; there was complete hemiplegia of left side, and there were, at times, convulsions. An operation was suggested as affording a possible hope. Most likely the opportunity for successful procedure had already passed; but it made no difference now, as the parents refused surgical interference; before morning the boy had expired. This was a remarkable case. It was for a case precisely in every respect like this, in 1879, that the first trephining, where the disease was located by focal symptoms, was done. The clot was found and removed and the boy lived, and the name of Maceween, of Glasgow, became immortal. The hæmorrhage in this case was probably from the middle meningeal artery. At first, it must have been slight and probably was arrested, but, for some reason or other, on or before the morning of the seventh day, it again commenced. The pressure began at the speech area, gradually advanced to the arm, then to the leg area and finally extended largely and generally over the cortex, producing profound unconsciousness and death.

The trephine, in this case, should have been placed, according to Krönlein, at a point one inch behind the external angular process of the frontal bone at the level of the upper border of the orbit. If the bleeding artery is not found here, with a rongeur, the skull may be opened upward and backward; and again, if necessary, the trephine may be placed just below the eminence of the parietal bone. This is over the posterior meningeal artery. In trephining, the focal symptoms must be considered, and if they indicate the lesion to be on the opposite side from the seat of external injury, as in the so-called *counter coup*, or anywhere else, the trephine must be placed accordingly. The bleeding artery must be tied and the cavity washed out with warm sterilized water; and, in dressing, a thread or two of cat-gut should be introduced for drainage. Hæmorrhage may also come from a separation of the dura from the cranium at the point of impact, the small vessels thus ruptured slowly bleeding; or beneath the dura, the vessels in the pia-matter may be broken by the concussion. In all such cases the symptoms indicating the trouble come on sometime after

the injury, except, perhaps, when the main trunk of the middle meningeal is severed. An interval of consciousness, however short, between the time of accident and the appearance of severe symptoms is a most valuable diagnostic point as to hæmorrhage. Cerebral hæmorrhage, that is, hæmorrhage beneath the meninges, comes, as a rule, from great injury. When from the middle cerebral artery, its symptoms are not much different from those of middle meningeal hæmorrhage. The clot, of course, is beneath the dura, and the location of the artery, it must be remembered, is in the fissure of Sylvius. The trephine should be placed, unless otherwise indicated, below the prominence of the parietal bone and, with the rongeur, opening should, if necessary, be made downward and forward in the direction of this fissure. Wiesman has shown the importance of operative treatment by the following statistics: Of 147 cases treated expectantly 131 died—89.1 per cent.; of 110 cases treated by operation, only 36 died—32.7 per cent.

What I shall have to say upon the technique of brain surgery, must, on account of the limits of my paper, be little, and even, for the little that I shall say, I must necessarily draw largely from the recognized authoritative literature, (particularly Starr). You will recollect that I have already said how the patient should be prepared. It will now be necessary to draw with iodine lines upon the scalp, corresponding with the fissures of Rolando and Sylvius. This should be done before the patient is anæsthetised. It has been suggested to puncture with an awl at three points along the line which is most important to regard. These points will serve to guide in the line when the scalp is removed. A puncture may also be made where the point of the trephine is to enter. The incision should be made of horse-shoe shape, so directed, if possible, as to afford the best nutrition to the flap, and large enough to furnish plenty of room for operating. As much as possible of the incision should be made with one bold sweep of the knife. The scalp should be hastily dissected up and turned back, the assistant, at the same time, with forceps and sponges controlling, as much as possible, the hæmorrhage. The pericranium should be left on the bone; however, many operators raise it with the flap. The trephine should now be applied at the point determined upon. One or two openings may be made, and the space between the openings may be cut away with the rongeur. The gouge is often used for opening the cranium in children, and by some, in all cases, the chisel is preferred. If the dura is to be incised, it should be carefully cut with the point of a scalpel and, then, the edge be lifted up with a tenaculum and through this opening the blade of a probe pointed scissors be passed. It should be cut at a distance of one-fourth of an inch from the edge of the bony opening. If there be vessels in the dura, they must before cutting be ligated, using for the purpose a fine curved needle and cat-gut. The brain covered with the pia-matter may now be inspected; it may be palpated with the finger or explored with a grooved needle. Exploration with the grooved needle or director or by incision should always, if possible, be made perpendicularly to the convolution, as by so doing less damage is done to the brain substance (and I may add here, parenthetically, that the brain may thus be safely explored to a depth of two or two and one-half inches). If there be bleeding

vessels in the lacerated or incised pia-matter, they may be controlled by pressure with gauze or forceps; vessels in the substance of the brain do not bear ligatures. Solution of anti-pyrine 1 to 40 has been recommended by Keen as an efficient hæmostatic. Clots are to be wiped away with the sponge, or removed gently with the finger or blunt point of scissors. A cyst, if superficial, may be cut away; if deep, it must be freely incised and packed with iodoformed gauze. Before closing the wound it should be gently irrigated with sterilized water or salt water, 1 per cent.; or, if there has been an abscess, with sublimate solution 1 to 8,000. A few strands of cat-gut, or a piece of folded rubber tissue, should be left in the most dependent part of the wound and extend through an opening in the dura and scalp for drainage. The dura should be stitched with cat-gut and the scalp with silk. The part should now be washed with corrosive sublimate solution, dried with sterilized sponge (gauze), and dusted with iodoform. Iodoform gauze should be applied, over this sublimate gauze, then cotton, and finally all must be held in place by a roller. In a certainly aseptic wound drainage may be omitted, but Lanphear, I believe, recommends in all cases the introduction of a strand or two of cat-gut. The drainage material may be removed on the second day and a permanent dressing applied.

We are now able to consider more intelligently and with less time than we could otherwise have done the brain surgery that pertains to immediate trauma and traumatism. We have seen how a very trivial injury to the head may produce not only serious but fatal intra-cranial lesion; and in nearly all of the pathologic conditions for which operative procedures are done, the initial source of the trouble has been from local injury. An injury to the head must therefore always be considered serious and watched with anxiety. So intimate are the vascular and lymphatic connections between the outside coverings of the skull and its bony and diploic structure and the meninges and the brain substance that the smallest scalp wound may be the source of a fatal meningitis or encephalitis or abscess. A blow upon the head without doing much damage to the scalp or skull may produce lacerations of the brain substance, rupture its vessels and cause ecchymosis and hæmorrhage. Not uncommonly does it produce a separation, at the point of impact, of the dura from the cranium. Inflammations and effusions, characterized by delirium and coma, usually attend such traumatisms. Therefore such cases should be treated with great consideration. Blows upon the head, of violence, produce, so-called, *concussion*, and if they injure the skull, so as to cause depression of bone or the intra-cranial contents so as to cause hæmorrhage or effusion, they produce a condition known as *compression*. In the first instance the patient is stunned, faint, feeble, nearly, but not absolutely unconscious; the pulse is irregular, weak and frequent; respiration shallow. In the latter, the patient is in profound coma; breathing is slow, labored and puffingly stertorous; the pulse is slow. In the former the patient generally is sick at the stomach and vomits; in the latter there is absolute suspension of sensibility of the stomach. These are a few of the most prominent characteristics of these different conditions—conditions which, you well know, have been discussed so much in all works on surgery.

They often exist together. The symptoms of concussion soon pass away; coma continues and usually becomes more profound. When a depressed bone or hæmorrhagic clot or inflammatory exudation involves or presses upon the special-sensory or motor regions we have, of course, corresponding focal symptoms. I have already taken up too much of your time and must therefore be brief in the consideration of this part of my subject. We have already learned the importance of the great principles of asepsis, and that with the practical application of these principles, operative procedure, *per se*, is not dangerous. We have studied localization and understand the indications of focal symptoms. We have learned that local pressure upon the cortex, be it bone or neoplasm, or what not, will more than probably, eventually, if it does not immediately, produce severe brain disturbance. Briefly then how must we treat a patient with an injury of the head. The scalp should be shaved over a considerable area around the wound, and this area should be thoroughly washed with antiseptic solution; the wound should then be washed and cleansed with a similar solution, and with sterilized fingers should be examined. If there are no serious symptoms, and nothing to indicate further proceedings, it should be closed by suture, using sterilized silk or cat-gut. If the edges of the wound are ragged and contused, and dirt ground in them, it would be well to trim them with scissors before closing them. The wound is then dusted with iodoform and dressed in usual manner. If after a contusion positive evidence of inflammation, as pachy-meningitis, lepto-meningitis or encephalitis, should ensue, the scalp should be raised and trephining performed, and the parts involved drained, just as we would do in injury elsewhere, causing inflammation. If we had inflammation of the tissues beneath the palmar fascia from trauma and there was severe local and general disturbance what would we do? We would certainly incise and drain. Why not under like circumstances, open through the cranium and give vent to the inflammatory exudates? Isn't it infinitely more essential to do so? If there is fracture with no depression, although compound, the wound should be dressed and treated on the expectant plan. If, however, there should be cerebral disturbance, trephining should be done. Often in such cases a fragment of the inner table is pressing upon or penetrating the brain. If, in either simple or compound fracture, bone is depressed, it must be raised either by trephining or cutting away the overlapping ledge of bone with a chisel and raising with an elevator. Of course, as little bone should be removed as possible. In all these cases, it is understood that the scalp has been raised in the usual manner as described under the technique. Continued profound coma without evident cranial depression, usually, means hopelessness, and to operate without hope or indication is unwarrantable. And yet, in the case of Mc., a man who fell from a bridge, and was profoundly insensible from the time of injury, Drs. G. A. Biddle and T. C. Biddle and I trephined on the second day, We did this for the purpose of ascertaining whether a depressed fracture of the inner table might not exist beneath the point of contusion. If there had been discharge from the ear indicating fracture at the base of skull and probably basilar hæmorrhage, we certainly would not have considered trephining. But as the case was, we thought then and still believe the operation was justifiable.

It certainly added no additional danger to the patient. I might relate many cases from personal experience, illustrative of what I have said in reference to head and brain injuries, and I might recite with, perhaps, some little personal vanity, a number of operative procedures, which I have done, where depression with coma existed in which the results were brilliant, but to do so would add no value to a paper already too long.

THE LIGAMENTS OF THE LIVER.

(Continued.)

BY BYRON ROBINSON, M. D., CHICAGO, ILL.

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III.—THE CORONARY LIGAMENTS OF THE LIVER.

(*Ligamentum Coronarium hepatis, Posterior Ligament of the liver, Ligamentum Hepato-phrenicum, Ligamentum transversum hepatis.*)

The coronary ligament of the liver is the transverse fold of peritoneum which connects the liver to the tendinous portion of the diaphragm. It is divided by the vena cava inferior and the folds of peritoneum showing the point of division are known as the suspensory ligament of the liver,—a double-bladed fold into which the two coronary ligaments extend. The coronary ligament extends from the diaphragm to the posterior border of the liver and from the right to the left margins of the gland. It frequently forms a peritoneal duplicature (mesenterium) on the posterior border of the left lobe, but never do the upper and under blades of the peritoneum come in contact at the posterior border of the right lobe. At the right and left margin of each lobe a duplicature is always formed, known as the triangular or lateral ligaments. If one opens an abdomen by two long crucial incisions and introduces the hand along the left side of the suspensory ligament on the superior surface of the liver he will be able to feel the left portion of the coronary ligament extending between the diaphragm and the posterior border of the liver and reaching from the suspensory ligament to the lateral margins of the lobus hepaticus. By passing the hand on the right side of the suspensory ligament the right portion of the coronary ligament may be felt extending in a similar manner to the left. To see the coronary ligament throughout its whole extent in an ordinary adult cadaver, the ribs should be removed on a level with the xiphoid cartilage, so that the diaphragm may be well reflected on the thorax. The best method is to dissect the diaphragm from the ribs on both sides well up into the thoracic cavity, being sure to retain the diaphragm, covered by its peritoneum well in tact. Now, dissect away the skin and muscles from the ribs as high as the sixth rib and carefully exsect all the ribs several inches above the level of the xiphoid appendix.

By reflecting the diaphragm well over the thorax and dragging down the liver, the coronary ligament may be distinctly observed throughout its whole course. It is seen stretched like a drum-head between the tendons of the diaphragm and the posterior liver margin. The suspensory ligament marks well the division between the right and left portion of the coronary. It points to

the border between the right and left liver lobes. On the right side the coronary ligament is short, it holds the liver close to the diaphragm and is always composed of one blade of peritoneum only. This blade of the coronary ligament extends from near the middle of the tendinous portion of the diaphragm, precisely where the suspensory ligament merges into the right coronary ligament immediately to the left of the vena cava inferior. The course of the right coronary is from the right border of the upper end of the suspensory ligament downward to the right, passing over the inferior vena cava to the right diaphragmatic artery to the tendinous portion of the diaphragm to the margin of the great lobe of the liver where this ligament merges into the lateral ligament (*ligamentum triangulare dextrum*). The right portion of the coronary ligament ends just above the point of the liver where from its inferior border the *ligamentum hepato-renal* arises to pass over the kidney and *pars duodeni descendens*.

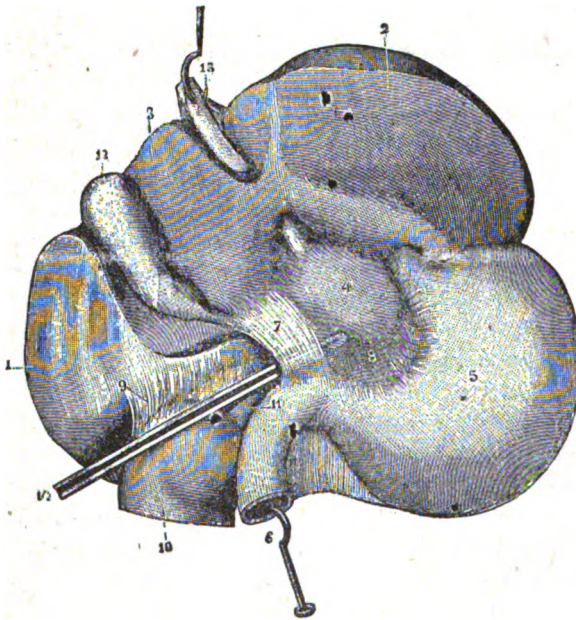


FIG. 6.

Fig. 6 (after Testut 1894), is an excellent illustration of the peritoneal folds connecting the kidney, duodenum and stomach to the liver. The cut, however, does not show the upper portion, or *pars tendinous*. A probe is passed through the foramen of Winslow or foramen omenti minoris. 1, liver; 2, left liver lobe; 3, quadrate lobe; 4, Spigel's lobe, shimmering its outline through the semi-transparent gastro-hepatic omentum, or anterior mesogaster; 5, stomach, dragged downward while the liver is dragged upward; 6, duodenum; 7, is the *pars hepato-duodenale*, the real neuro-vascular pedicle of the liver, containing the hepatic duct, artery, portal vein, lymphatics and nerves necessary for the maintenance of the liver.

The right border of the *pars hepato duodenale* bounds the foramen of Winslow. It is drawn in the figure so as to show its distinct outline and strength. Its sharply defined left border is observable where it merges into the *pars flaccida*. 8 (and 4) mark the *pars flaccida*, the transparent, lax portion of the gastro-hepatic omentum, through whose translucent walls may be seen the outline of Spigel's lobe, the sound which has passed through the foramen omenti minoris, 9 is a slightly exaggerated illustration of the *ligamentum hepato-renal*; 10, right kidney; 11, right adrenal; 12, gall-bladder; 13, umbilical vein; 14, sound passing through the orificum epiploon, and its end may be observed in the atrium bursa omentalis or bursa omenti minoris. The *ligamentum hepato-colicum* is not sketched, but it is only the extension of the *ligamentum hepato-duodenale*. I have made the *ligamentum hepato-colicum* the standard of measurement for the ascending colon and not the uncertain hepatic flexure of the colon.

The right portion of the coronary ligament bounds the upper border of a triangular or oval space on the diaphragm and liver which is not

covered with peritoneum. The lower border of this space devoid of peritoneum is bounded by the origin of the ligamentum hepato-renaie, while the internal border is bounded by the vena cava inferior. However, the very early rapid foetal development of the liver and its growth in the direction of least resistance explain the meridian and perpendicular direction of the longitudinal ligament of the liver. The direction of the vena cava inferior into which the venæ hepaticæ (3 to 7) empty, no doubt has a determinating influence in producing the sagittal direction of the ligament. Yet the one peculiar feature of foetal liver development gives the key to the explanation. The liver in early foetal life is the one special viscus that receives nearly all of the fresh blood from the placenta or mother first, hence, its enormous size in early foetal, or even in early infant life. The ligamentum longitudinale hepatis is a part of the mesentery of the liver.

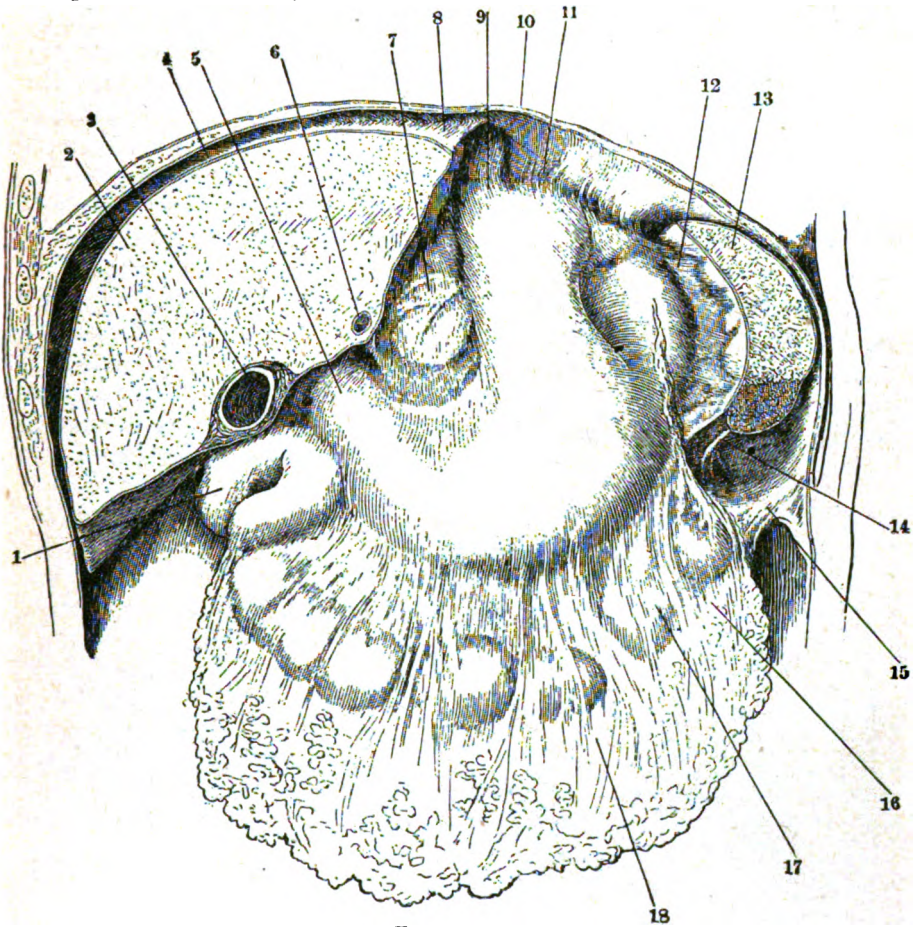


FIG. 7.

Fig. 7 (after Henle, 1873), is an illustration of the ligamentum triangulare sinistrum and the ligamentum coronarium hepatis. The figure was designed to show the upper abdominal viscera by a frontal cut passing through the liver. 1, hepatic flexure of the colon; 2, liver; 3, segment of gall-bladder; 4, ligamentum coronarium hepatis;

5. pylorus; 6, ligamentum teres cut through while enclosed in the substance of the liver (a kind of pars hepatis); 7, points to Spigel's lobe of the liver shimmering its outline through the pars flaccida of the gastro-hepatic omentum; 8, ligamentum triangulare sinistrum; 9, upper end of the stomach; 10 diaphragm; observe the whole liver is well drawn to the right.

The right coronary ligament merges into the lateral or triangular ligament well behind and to the lower portion of the right lobe. The diaphragm must be well reflected upward and the liver strongly down in order to clearly expose the ligamentum coronarium dextrum. The right blade of the suspensory ligament merges into the right coronary ligament and also merges into the superior peritoneal covering of the right lobe of the liver. The left blade of the suspensory ligament merges into the left coronary ligament and also merges into the superior peritoneal covering of the left liver lobe. The left portion of the coronary begins at the left upper end of the suspensory ligament and passes horizontally to the left margin of the liver where it merges into the lateral ligament (ligamentum triangulare sinistrum). The left portion of the coronary ligament is quite different from the right. The difference is viz:—(a) the left coronary ligament is horizontal from the left to the right on the tendon of the diaphragm, while the right is very oblique, (b) the left coronary ligament very frequently forms a distinct peritoneal duplicature—a mesenterium—i. e., the peritoneum of the superior and inferior surface of the left liver lobe comes in direct contact where they extend from the diaphragm to the posterior margin of the lobus sinistrum. The left coronary ligament is frequently a peritoneal duplicature (mesenterium hepatis) of over an inch long, while the right is never a duplicature and is always very short. (d) The left coronary ligament not infrequently arises from the superior surface of the left lobe, while the right coronary ligament always arises from the posterior margin of the right lobe. (e) The œsophagus passes under the left coronary ligament, while the vena cava inferior passes under the right coronary ligament.

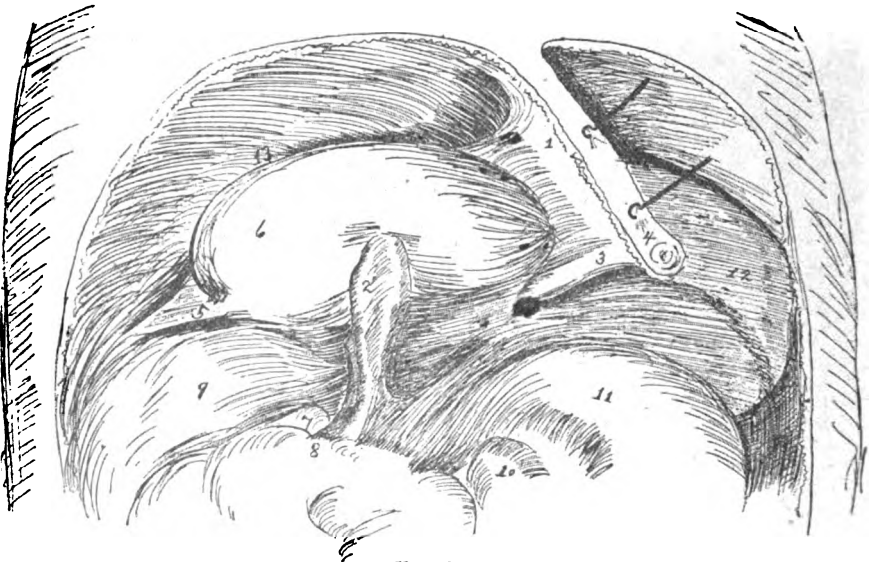


FIG. 8.

Fig. 8 (after Byron Robinson) is an illustration of the ligamentum suspensorium hepatis still attached to a portion of the abdominal wall. The hooks draw the suspensory ligament toward the left. The right lobe is drawn disproportionately small. 1 to 3 indicates the suspensory ligament; 4, the abdominal wall; 13, the right coronary ligament; 6, right liver lobe and 12 the left lobe. 2, gall-bladder; 11, stomach; 5, right lateral ligament; 9, hepato-renal ligament; 8 is on the ligamentum teres hepatis.

The two lobes of the liver in early foetal life were symmetrical and hence the right and left coronary ligaments about the same size, but with excessive atrophy of the left lobe, the left coronary appears relatively larger than the right, yet it is only apparent and due to the greater atrophy of the lobus sinister hepatis. It is a common matter to find that the left coronary ligament originates on the superior surface of the left liver lobe and not on the margin of the lobe. It is difficult to conceive why this occurs, unless it be due to the rapid development of the fundus of the stomach which may force or drag the posterior margin of the lobe downward and thus inducing the acquired ligamentum coronarium sinistrum to arise on the superior surface of the lobe. With the diaphragm reflected upwards and the liver forced downward, it is plain to observe the left coronary ligament in its entire course stretching between the left liver lobe and the tendinous diaphragm anterior-posterior and reaching from the upper end of the suspensory ligament to the left margin of the left liver lobe horizontally. The left extremity of the left coronary ligament is known as the lateral or triangular ligament (ligamentum laterale sinistrum). The left coronary ligament is a strong, horizontal duplicature of peritoneum of acquired origin and hence has no *membrana mesenterii propria*. However, considerable connective tissue, blood vessels, lymphatics and nerves are found in the left coronary ligament. As the ligament passes from left to right its blades diverge before the inferior vena cava. The lower blade passes on the under surface of the liver and reflects into the upper or left blade of the gastro-hepatic ligament, while the upper blade of the coronary passes on the superior surface of the liver until it is reflected or blended with the left blade of the suspensory ligament. However, there is an irregular triangular space not covered by peritoneum at the right end of the left coronary ligament, where its superior and inferior blades have their widest divergence. This triangular space, uncovered by peritoneum, lies between the liver and diaphragm. Its right boundary is the inferior vena cava, its superior boundary is the diaphragmatic insertion of the coronary ligament, while its inferior border is the insertion of the lower blade of the coronary ligament. It may be observed that there is an unequal double triangular space not covered by peritoneum existing on the posterior surface of the liver. The base of the triangles is common, *i. e.*, the vena cava inferior and the apex of each triangle is the lateral ligament. This space not covered by peritoneum is variable in individuals, both as to shape and size. The left triangular space is very narrow towards its apex, while the right is quite wide towards its apex. The coronary ligaments is nourished by the diaphragmatic arteries supplied by the phrenic, vagus and sympathetic nerves and has many lymphatics. The border of the inferior coronary ligament can be easily traced by lifting up the liver and beginning with the finger at the lower edge of the left lateral ligament. Pass the finger along the

under surface of the left lobe against the posterior wall over the œsophagus to the upper end of the longitudinal fissure posterior to the gastro-hepatic ligament, thence, over the vena cava downward to the origin of the ligamentum hepato-renal. The whole border can be touched with the finger by lifting the liver well upward and reflecting backward the diaphragm with resected ribs. The coronary ligaments are far more of a supporting character to the liver than the suspensory. Yet the right coronary is the chief support of the posterior margin of the liver. It may be shown that the ligamentum venosum is the chief liver support, though the liver is retained in its position by intra-abdominal pressure and other viscera. The short and rigid right coronary ligament and the elongated flaccis left, together with the latter's frequent origin from the superior surface of the left lobe are peculiar features of the coronary ligaments.

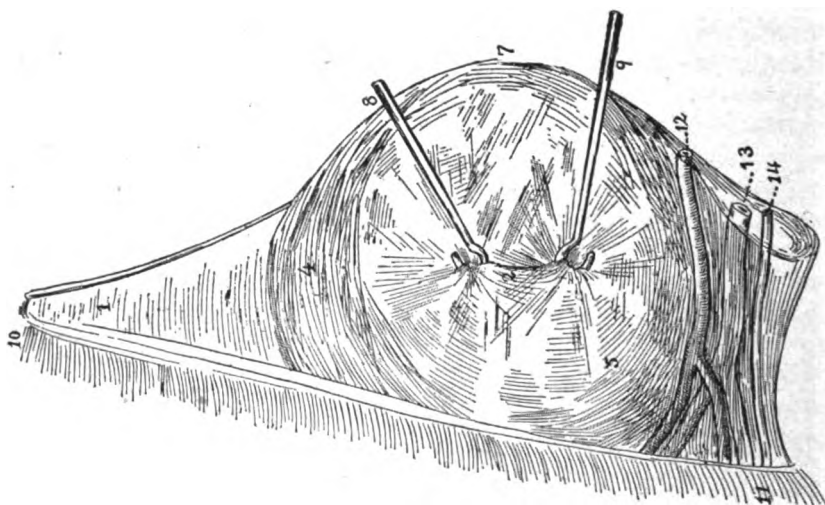


FIG. 9.

Fig. 9 (after Byron Robinson) is a representation of the outlines and surfaces of the ligamentum gastro-hepaticum. 1, pars tendinous; 2 (and 5) show the pars flaccida drawn up into folds by the two hooks (8 and 9); 4, shows the lower concave border of the pars tendinea merging into the pars flaccida; 6, 10 and 11 show the hepatic border of the lesser omentum at the transverse fissure of the liver; 5 is the border of the pars hepato-duodenale merging into the pars flaccida. Note that the fibres on the borders of the pars tendinea and pars hepato-duodenalis are directly continuous with each other at the transverse fissure of the liver, and that the pars flaccida is a mere endothelial transparent septum closing up the gap between these two strong, ligamentous structures; 12, hepatic artery; 13, portal vein; 14, cystic duct—all three enclosed with nerves and lymphatics in Glisson's capsule (Francis Glisson, (1597-1677), Professor of Anatomy, at Cambridge, England.) This figure is drawn from nature, while the stomach and liver are held well apart, putting the lesser omentum on a stretch. The present figure was drawn from an adult of some sixty years of age. The stomach boundary at No. 7 is generally more prominent than the figure indicates. The fibres at number 4 generally show a sharp border, while at No. 5 the border is not as sharp, but gradually thickens and passes into the ligamentum hepato-duodenale. Observe the portal vein lies between the hepatic artery and gall-duct.

(To be Continued.)

ARTIFICIAL RIPENING OF CATARACT.*

BY JAMES MOORES BALL, M. D., OF ST. LOUIS, MO.

Professor of Ophthalmology in the St. Louis College of Physicians and Surgeons; Professor of Ophthalmology in the Woman's Medical College of St. Louis; Oculist to the City Hospital; Oculist to the Woman's Hospital; Ex-President of the Tri-State Medical Society, of Iowa, Illinois and Missouri; Editor of the Tri-State Medical Journal.

Probably many of the members of this society can remember to have seen middle-aged patients, the subjects of cataract, in whom the disease progressed with exasperating slowness, and whose vision was greatly impaired. A time comes when the sufferer can no longer use his eyes in the pursuit of his daily vocation, while the surgeon, from the character of the cataract, justly concludes that complete lental opacity will not take place for a long time. Incomplete lental opacity exists in those cases of cataract in which we find an iris shadow, a considerable red reflex when the ophthalmoscope is used and the pupil dilated, and a striated appearance exists on examining the lens by oblique illumination. With the upright image, making use of a + glass of 10. or 12. D strength, one can see an opacity of the lens, or of the capsule or of both. Possibly you may have prescribed weak atropine drops for the purpose of dilating the pupil, so that rays of light might pass through the comparatively clear peripheral portion of the lens and thus a better visual acuity be gained; whilst you advised the sufferer to wait patiently until the cataract should mature and then an extraction be made. For generations, it has been accepted doctrine in ophthalmology not to operate on an unripe cataract. Now, things are different. If a cataract be unripe, and the opacity extend but slowly or be almost stationary, we do not hesitate to ripen it by artificial means.

Very little is said on this subject by the text books. Fuchs, Professor of Ophthalmology in the University of Vienna, whose valuable book has recently been issued in our language, gives less than a dozen lines to the artificial ripening of cataract, and describes but one operation therefor. De Schweinitz, of Philadelphia, who has given us one of the latest American text-books on the eye, devotes about the same amount of space and mentions two operations. Berry, of Edinburgh, and Swanzy, of Dublin, have but little to say. Noyes has a page and describes three operations. Schmidt-Rimpler, of Marbourg, says nothing. Meyer, of Paris, describes two operations.

When is a cataract ripe? Generally we say it is ripe when fingers can no longer be counted. An oculist would answer by saying: when, after an extraction, a cataract will leave behind no cortical substance in a condition to swell and set up secondary irritation and inflammation, it is ripe. Some cataracts, according to the finger test, never attain maturity. Such are those rare examples of brown or black cataract, in which the lens becomes sclerosed but the patient can always count fingers. My second extraction, made seven years ago, was an instance of this kind, and made a good recovery. The most expert oculists are at times deceived as to the ripeness of a cataract, and in some cases the condition of the lens can be determined accurately only after an extraction.

*Read before the Mississippi Valley Medical Association, at Detroit, Sept. 4th, 1895.

Such an error is liable to be followed by serious consequences. In immature cataracts pieces of cortex are sure to be left behind. Such pieces may become engaged in the lips of the corneal wound where they imbibe aqueous, swell up and often lead to purulent inflammation in the wound or interfere with healing. In such cases, if an iridectomy has not been done, prolapse of iris and incarceration of iris in the corneal wound with subsequent development of a cystoid cicatrix, is very liable to occur. If a piece of cortex remains in the anterior chamber, it will cause an iritis; if the case does well, the cortex will be absorbed in time and will leave no bad results. The dangers attending the leaving of cortical matter in the eye, and the impossibility of extracting immature cataracts by the ordinary operation without leaving such material, have lead modern ophthalmologists to adopt two methods of action which are widely different.

The first is to extract all of the immature cataract that can be removed by the ordinary procedure and afterwards wash out the debris by irrigating the anterior chamber, using for this purpose an antiseptic or cleansing solution. The second is to ripen the cataract by artificial means. Let us consider these operations in detail.

For the purpose of irrigating the anterior chamber different operators use different instruments and solutions. Although the idea of irrigation was first advanced by Haab, of Zurich, it was first practiced by Wicherkiewicz, of Posen, who flooded the anterior chamber with a solution of chloride of sodium (7-1000) boiled and cooled down to 30 per cent. McKeown, who invented a new syringe, used simply warm water. Panas, and others of the French school, irrigate with a solution of bin-iodide of mercury (1-20,000). In this country, the leading advocate of irrigation, as a routine practice, is Dr. Lippincott, of Pittsburgh. He has invented an improved syringe through which a boric acid solution (gr. ii to 3i) is passed into the anterior chamber. This operator has recently published one hundred cases of extraction in which irrigation was used as a routine procedure. His results have been excellent. He advocates irrigation in all cases after extraction. His syringe strikes me as a very practical instrument and I do not hesitate to employ it in suitable cases. It is easily kept aseptic, the flow can be perfectly controlled, the instrument can be securely handled, and the force of the stream can be regulated.

Some objections to irrigation have been made. Many of them seem trifling. Thus it is said to be dangerous to introduce the nozzle of the syringe into the eye. Why? We do not hesitate to pass a cystotome into the anterior chamber, to lacerate the capsule, nor a spatula to replace a prolapsed iris following an extraction, or to loosen the edges of an iris coloboma after an iridectomy. I believe that in these days of antiseptic surgery, in the hands of a competent operator, there is practically no danger from the introduction of instruments into the eye. Every successful extraction or iridectomy is an argument in favor of the proposition just made. A spatula, a cataract knife, or a cystotome can be easily made and kept aseptic. How about the anterior chamber syringe? Can it, also, be kept free from germs? I believe the syringe of Dr. Lippincott can be. In fact, the success of the instrument in the hands of the inventor goes to show that it can be kept aseptic. I cannot agree with the

statement of Bettman regarding irrigation. He says: "I will state right here that I never employ this method, deeming it wiser, and surely safer, to either to await the ripening of the cataract or to hasten its maturity by trituration." Nor can I agree with White¹ that since "immobility of the operated eye and perfect control of the hand of the operator" are two absolute essentials to the successful performance of irrigation, consequently "it is a more or less hazardous addition to the steps of the operation." Certainly, it is not more difficult to irrigate than to artificially ripen a lens. The question, then, is not the safety of irrigation but rather the following: given a choice between extracting an immature cataract or maturing an unripe lens and then removing it. I think we will be on the safe side if we artificially ripen the lens and then extract.

In performing an operation for ripening immature cataract we aim to apply force in such a way that the lens fibres will be disarranged and aqueous can gain access to them. The disarranged fibres absorb aqueous, swell up and become opaque. Many years ago my old teacher, Snellen, noticed that, in those cases where preliminary iridectomy was done, a cataract was better matured than otherwise. The mere draining of aqueous and grasping of the iris and pulling it out sufficed to set up an increased opacification of the lens. Förster, of Breslau, taking advantage of this fact, brought out his operation in 1881. This consists of an iridectomy, followed by a trituration of the lens with the collapsed cornea intervening. The pressure is made concentrically with a strabismus hook, or cataract spoon. Förster's description of his operation is as follows:

"The procedure consists in gently rubbing the cornea, after doing an iridectomy, with the blunt end of an instrument, usually a strabismus hook or iridectomy forceps. The pressure exerted upon the cornea is transmitted to the lens, loosening and splitting the still adherent and semi-opaque cortical fibres. These, in the course of days and weeks, become perfectly opaque."

The operation of Förster has been modified by some American oculists who tap the anterior chamber, and then apply pressure to the cornea. In such an operation no iridectomy is made, but the pupil is dilated by atropine. In the operation of Förster, the pressure is made at a point corresponding to the iris coloboma.

Many years ago (1858), Mooren, of Düsseldorf, tried to ripen cataracts by puncturing the anterior capsule and performing iridectomy. This operation often failed of its purpose and, moreover, iritis happened frequently enough to cause the operation to be condemned.

In 1887, Dr. Bettman, of Chicago, proposed a method of operating which consists of massage of the lens directly on the capsule, by means of a spatula introduced into the anterior chamber. The operation is thus described by its inventor: "After doing an iridectomy the eye is rotated downward with a fixation forceps, so as to facilitate the entrance of the spatula into the anterior chamber, and to permit its free movements in all directions. The instrument

¹ *Medical Record*, July 30, 1892, p. 122.

² *Archives of Ophthalmology*, Vol. xxi, No. 4.

employed is such as all oculists use in restoring prolapsed iris. It is a flat, slightly flexible piece of steel, 28 mm. long, and 1 mm. broad, attached to a handle. The blunt surface of the spatula is placed in contact with the lens, gentle but firm to-and-fro motions are made over its surface. The end is slid under the iris on both sides of the pupil and below it, the massage being thus continued over the larger part of the lens. A half dozen to ten strokes will suffice.¹"

The operation of Bettman may be modified by omitting the iridectomy, making the trituration through a dilated pupil. This was suggested by Dr. Pooley², of New York, who proved the success of the operation by experiments on rabbits. Camdrou, a Frenchman, advanced the same suggestion in 1883.

Lastly, Dr. White, of Richmond, Va., has described an operation for immature cataract. He opens the anterior chamber, drains off the aqueous and then employs external massage.

The operations for immature cataract can be tabulated then as follows:

- 1.—Simple division of anterior capsule.
- 2.—Division combined with iridectomy: Mooren's operation.
- 3.—Division and external massage.
- 4.—Iridectomy and external massage: Förster's operation.
- 5.—Iridectomy and internal massage directly on anterior capsule: Bettman's operation.
- 6.—Simple paracentesis and external massage: White's operation.
- 7.—Paracentesis with direct massage.

Now the question arises: which one of these is the best operation. Before performing any of these, the operator should know that the zonula is intact, the tension not below normal and the pupil dilatable. Now let us take up these various operations seriatim:

1. Simple division of the anterior capsule, as a remedial measure in immature senile cataract is condemned by all authorities on account of the inflammatory changes which follow a rapidly swelling lens. These are not only iritis but also pan-ophthalmitis. The most experienced ophthalmic surgeon cannot always tell when a wound of the lens will be followed by a dangerous reaction. A timid operator may make too small an opening in the capsule, while the bold surgeon may lacerate the fibres too extensively and cause the lens to swell too rapidly. Sometimes the result is entirely negative, the operation causing a plug of cortex to ooze out of the capsular wound which afterwards closes. The same objections obtain in the case of (2) division combined with iridectomy and (3) division with external massage. Consequently we now come to

4. Iridectomy and external massage, or the operation of Förster. This is the operation formerly most frequently performed and is much to be preferred to any procedure in which the capsule is divided. However, there are some objections to it. Thus, to the minds of some, the iridectomy would be a serious objection and this would come with special force to the minds of those who, like myself,

¹ Bettman: *Medical Record*, July 30th, 1892.

² Pooley: *N. Y. Medical Journal*, Dec. 26th 1885.

prefer to extract cataract without iridectomy. Again, although the pupil is dilated by atropine before commencing Förster's operation, yet some fibres of the iris are certain to be pressed between the lens and cornea, and the alternate compression and relaxation may cause change sufficient to set up an iritis. Noyes, Bull, Theobald and several others have reported cases of iritis following Förster's operation, and Mittendorf has recorded the loss of an eye. It must be remembered that the cornea also is being trituated and its epithelial coat may be rubbed off. Förster has himself called attention to the danger of injury to the cornea and iris, and to the possibility of producing a dislocation of the lens. The danger of dislocating the lens pertains as well to other operations.

5. We come now to the fifth operation, that of direct massage, or Bettman's operation. This, to my mind, is the best operation. It can be done with (5) or without (7) iridectomy. The trituration is directly upon the lens capsule. The iris is not compressed, hence the danger of iritis is less than in Förster's operation. The per cent. of successes I believe will be found to be greater than in any operation where the massage is indirect.

6. White's operation or paracentesis and external massage. The same objection (danger of compressing the iris) that applies to Förster's operation also pertains here.

3508 FRANKLIN AVENUE.

FRACTURE OF SKULL, VAULT AND BASE; RUPTURE OF SUPERIOR LONGITUDINAL SINUS, DEATH; POST-MORTEM.*

BY J. D. GRIFFITH, M. D., KANSAS CITY, MO.

Professor of Surgery Kansas City Medical College.

We have for your examination this morning, this child, Charles Mitchell' aged three years and eight months, who was injured about eleven o'clock Friday morning.

When Dr. Albright saw the child first, he presented the appearance of a child with concussion, marked shock, with a small rapid pulse and cold extremities. No paresis, whatever, was evident at that time. He ordered warm applications and the ordinary treatment for concussion. Strychnia under these circumstances is undoubtedly good, and a very small dose of morphine. Nitroglycerine in doses of $\frac{1}{160}$ to $\frac{1}{80}$ of a grain is a good thing under these circumstances also.

When called back again to see this child at 5 o'clock, six hours after the accident, he found a hemiplegia over the entire right side, with some spasm of the left fore-arm and arm, the child lying in this position, (indicating) with a spastic action going on like that, (indicating) already in the flexors in the fore-arm on the left.

The pupils were both contracted; ptosis of the left eyelid.

*A Clinical lecture delivered before the class of the Kansas City Medical College at the City Hospital, Oct. 21, 1896.

Cedema, during the night was marked from the frontal prominence to just back of the parietal eminences.

The right side of the head seemed to be flattened a little. Opisthotonos now was well marked; the spasms or convulsions were tonic while they lasted, but clonic in general form. They would last for half a minute or a minute,—opisthotonos well marked and then it would subside gradually,—but the erector spinæ seemed to be in a tonic spasm. The convulsions were now marked in the right arm and tonic in form. Clonic spasm continued in the left arm and fore-arm and in the left leg and thigh.

The respirations were always rapid, as high as 50 and 60.

Spasm of the epiglottis and laryngeal muscles came on and continued during the tonic spasms of opisthotonos.

There was no hemorrhage from the ear at any time. During the examination I thought I detected crepitus in the first or second cervical vertebra, and spoke of it during the first night.

Yesterday morning at eight o'clock the child died. Yesterday afternoon Dr. McVey conducted the post-mortem.

On opening the scalp from ear to ear and pushing it backward and forward, together with the coverings of the calvarium, we found a fracture. That fracture led from just in front of the ear on the left side apparently clear over the vault of the skull, covering the line of the coronal suture to the other side—clear across. From this blood had oozed under the periosteum and had given rise evidently to the cedema which we saw. On opening this calvarium and taking it off, we found that there was a rupture of the dura-mater, just to the left of the superior longitudinal sinus, in the line of the fracture, and a clot of blood protruded through it, the portion of the clot which you here see. We found that the superior longitudinal sinus had been ruptured at this point,—an exceedingly rare occurrence. The dura mater had been ruptured on the left side. We will say that that is the vault of the skull, (illustrating by drawing on the blackboard.) Right under it we have the dura mater forming the internal periosteum of the skull A, and dipping down that way, B and C. We have the superior longitudinal sinus where it splits here and here and joins again,—this is the sinus in here, A B and C that is the blood in there, O; this was ruptured in here and through under there, R; the rupture going through the side of the sinus, so that it could let the blood out into the brain substance, on the left side, in the motor area, just in front of the fissure of Rolando, its upper portion. This blood was extravasated, sub-dural, over an area of $2\frac{1}{2}$ inches in length by $1\frac{1}{4}$ inches in breadth, backward and forward, but only in the place where the rupture occurred was there a thick clot that you see right here. Not only did this rupture extend here and the blood was extravasated here, but deeper still and further on into the brain, between the convolutions, near the fissure of Rolando. We had also extravasation of blood continuing down to the corpus collosum on that side, but it was capillary. Commencing along here you see again these places where the extravasations seem to be capillary, all along here you see this is highly discolored, very markedly so; oozing has taken place,—extend-

ing downward to the corpus collosum, in the great longitudinal fissure of the brain,—extending right down in a line, in front of and anterior to the fissure of Rolando.

On taking out the brain we found the under surface in very good condition until we reached the medulla oblongata. We found that this fracture had extended on down the left side through the middle fossa to the Sella Turcica where the circular sinus lies.

When we came to the medulla oblongata, and just below it, we found another clot, which is the most interesting one of the whole case. You can see a portion of this clot.

Now just think for a minute of the nerves that originate down here. The spinal accessory coming out from the side here, going upwards again into the cavity through the foramen at the base and coming out again with the eighth pair, communicating with and probably giving motor fibres to the pneumogastric, the recurrent laryngeal supposed to be supplied to some extent through this, and you have probably, the cause of the spasm of the larynx and epiglottis.

Now I will call your attention to another thing in connection with this case. I told you that I called Drs. Coffin and McVey's attention to the fact that I thought I felt crepitus; I evidently did, because we find that the atlas was fractured here, right in its anterior portion, and right near the spinous process, and you can get the crepitus occasionally. I have never seen this bone fractured in this position before. The odontoid process and its relation with the atlas is perfect; the transverse ligament has not been ruptured at all, nor has the process been thrown out of position.

This hemorrhage which you see here in the upper portion of the cord extended along the medulla a distance,—not clear up to the pons varolii, but extended upwards for probably three-fourths of an inch.

Now, you may say, why didn't we trephine? With the variety of symptoms which we had, I don't know that we were warranted in it. We know that intracranial pressure will give rise to convulsive movements. Of course if this pressure is at one point, say in the leg area, or an arm area, or face, it will affect those respective parts alone; but here was a conglomeration of symptoms, which didn't warrant us in going on and trephining. If we had trephined, with the spastic action on the left, and we will suppose we went in over the corresponding centers we would not have found anything. On the right, with the hemiplegia on the right, which was first developed, but which did not continue all through, and which seemed to continue in the leg for a while, the longest time, we would have found this clot in this opening in the superior longitudinal sinus with the rupture of the dura mater, and which extended down from this point clear to the corpus collosum, all the way through. We will suppose we get out the clot. We would have had an enormous hemorrhage from our sinus. This could have been stopped by plugging with gauze or with the hemostat; both of these of course can be left in position in dressing a brain wound without any very great danger if asepsis has been followed. I have left the hemostat on a sinus for seven days; I have left the

plug in a sinus for several days. But here was a clot, and here was trouble at the base of the brain and along the upper portion of the cord which we could not have reached. The first bone of the spinal column was fractured and there was hemorrhage in the cord. We could not have reached this. If we had trephined we probably would have shortened the child's life. He would have died a little earlier than he did.

Wherever there is marked oedema,—not over a single spot, like a man getting a stroke on a corner or an edge somewhere, and having an extravasation beneath the scalp,—but where there is a general oedema over a considerable area I think it is safe in your saying that there is a fracture beneath it. Here was an oedema that extended over an area probably four inches from before backward and four or five from side to side, with the extravasation that occurred here under the pericranium, and you had the oedema as the result of it. I think you are safe in going down on this kind of a thing for fracture, but I do not believe you would have done a particle of good in trephining this child.

I called your attention to the fact that this child had the look of a hydrocephalic child. We found the ventricles in perfect order, and we found no hydrocephalus. Mal-nutrition will give you this same appearance that we spoke of—this same appearance of an “old-looking young child” with a big head.

This is the characteristic appearance of a clot in the brain and I brought it down here for you to look at. It tears up brain substance and ruins it all around its edges, bruises the cells, and if we had nothing else but this trouble in the left side of the brain we undoubtedly would have had all of our symptoms confined to the right side of the body; but there was something else which gave us trouble in both sides, which we have found here. The episthotonos came from the irritation up here at the base of the brain and at the commencement of the cord.

COMMUNICATIONS.

LONDON HOSPITALS AND MEDICAL SCHOOLS, AS SEEN BY AN AMERICAN.

There are in London, ten general hospitals, each with its school, the largest being the London, with 800 beds. This is in White Chapel, the region made famous by “Jack the Ripper.” Located in the poorer part of the city, it has a heavy service, especially in the “casualty” and dispensary, or “out patients” department as it is here called. The hospital is a large H shaped building, spacious, well lighted and quite pleasant within. The school, adjoining, has nothing out of the ordinary. In the faculty are several men known by reputation to your readers: Hughlings-Jackson; Monsell Moullin, Fred’k Treves, Jonathan Hutchinson, Stephen Mackenzie and Henry Fenwick.

St. Bartholomew’s, with 750 beds, is a close second in size, and is the oldest and best known in the kingdom. Founded in 1123, under church control for three centuries, confiscated by Henry VIII, repeatedly enlarged it was finally rebuilt in 1730. The school originated in 1662 and was rebuilt fifteen years ago,

the group of buildings having a large open space in the center. The wards accommodate 30 patients each and are very comfortable looking. Harvey, who discovered the circulation of the blood, was in the faculty for years. Hunter, the surgeon and anatomist, and Pitcairn, who first associated valvular heart disease with acute rheumatism, were also here. In the present faculty are Sir Dyce Duckworth, Champneys, Butlin and T. Lauder Brunton.

St. Thomas' is a magnificent pile of building at the south end of Westminster bridge, directly across the Thames from Parliament and Westminster Abbey. It consists of eight large, four-story pavilions lying side by side and connected with enclosed corridors, thus giving abundance of light and air, and isolation if desired. Externally it is by far the handsomest general hospital in the city, and the interior is on a par with the outside. The institution dates from the 14th century and has had more than its share of ups and downs, and was for a time connected with Guy's. The present buildings were put up 25 years ago with accommodations for 500 patients. The general arrangement is modern and very convenient, the two operating theatres being especially handsome, glass and polished nickel, and coper very much in evidence. The school is 150 years old and was rebuilt with the college. Nettleship, Semon and MacCormack are in the present faculty.

Guy's, near London Bridge, was founded in 1720 by the man whose name it bears. The hospital and school form an irregular cluster of rather ancient buildings, enclosing an open space in the center. The patients are about 500. Sir Astley Cooper was surgeon here as well as at St. Thomas', and here it was that Bright worked and gave his name to a class of diseases previously unknown. J. Branton Hicks, Savage, Pye-Smith, Galabin and C. H. Golding-Bird are on the staff.

Middlesex, with 250 beds, is in the west central district, and while not so old nor so large as the former ones, it is widely known. The operating theatre and smaller gynecological room are said to be the finest in London, but are not much superior to the ones at St. Thomas. They have here three wards for cancer cases which are quite an innovation. J. Bland Sutton and Henry Morris operate here.

University College Hospital and School are near Middlesex. The hospital accommodates only 200 patients but the instruction is said to be exceptionally good, and the faculty list contains an unusual number of famous names. Jenner, Russell Reynolds, Gowers, Radcliffe Crocker, Ringer, Schäfer, Erichsen, Heath and Horsley make a list to be proud of. The museum is especially good, the frozen sections and dissections can hardly be surpassed anywhere.

Among the other mostly smaller and less well known in America, are Westminster, St Mary's, St. George's, Charing Cross and King's College.

The schools proper are much the same, differing slightly from each other, and from similar American institutions. More attention is paid to museums and they are consequently more interesting and instructive here. In the larger hospitals the number of students is between 200 and 300 each, the smaller ones proportionately less; the fees ranging from \$600 to \$800. Comparing one with the other, the general opinion is that St. Bartholemew's is in the lead, with St. Thomas and University College next.

English medical training differs from ours in several respects. The term of study is five years, one year longer than any American college, two years more than most. The preliminary examination prior to matriculation is before a board entirely independent of the colleges, and includes "the 3 Rs," algebra, geometry (Euclid) latin, (Virgil and Horace) and the option of greek or a modern language. This would cut down the number of students very materially at home. The training is much more clinical, the students having full opportunity and being required to do a relatively larger amount

in the departments of the hospital and out-patient service. For instance at some of the hospitals each student attends personally to forty or more labor cases. Here the hospital *is* the school and is conducted as a teaching institution equally as a place to treat disease.

Finally, the diploma granting power is entirely outside of the schools being vested in three boards distinct from the schools and independent of each other; the Society of Apothecaries, The Royal College of Physicians, and The University of London.

By this means a standard is established and maintained, and all applicants must attain this regardless of schools. This sweeps out "diploma mills" and is an effectual cure of the "apathies" and "isms" which infect the American profession.

We must concede many points of superiority to the schools and training, but not so to English hospitals considered apart.

We have in the states at least four hospitals larger than St. Bartholomew's or even the London. With the exception of St. Thomas' the style here is ancient and for appearance, comfort and convenience our large institutions are well ahead. The positions on the House staff here are less desirable, for they carry with them much less responsibility and far less operative work.

EASTMAN.

LETTER FROM SIAM.

Dear Dr. Pearse:

I rejoice to be able to tell you that this year all the numbers of the INDEX have arrived thus far. A medical journal is quite important for me unable as I am to consult with any physician. But it does not by any means replace the knowledge one would acquire by contact with a brother physician. Still a medical journal if it be of the right kind is a valuable help to me.

This town has over 4,000 people and is the seat of the governor of the province; it is situated west of Bangkok, about 20 hours distance by rowboat, and 8 hours from the sea. The country is flat, but on the southeast the hills begin to rise; the nearest is a mile and a half from the town. The regent who ruled the country during the King's minority built a palace on it some 20 years ago, it is now almost a ruin. At first he decided to erect it at the foot of the hill, excavations were begun and the foundation laid. But then he changed his mind and ordered it to be built on a mountain. All the material was hauled up to the top of the mountain designated; then however the regent imagined the mountain was too high and the material was hauled down that mountain to be transferred to the mountain on which the palace stands, or rather on which it is now falling gradually. The hills which in several ranges run from north to south-west are covered with forest and two days journey from here are inhabited by run away slaves, criminals and a hill tribe, the Kariens, a people who very seldom leave their hills. They lead a nomadic life on the border line of Burmah and Siam. When small-pox breaks out among them (which happens not infrequently) they move away leaving the sick behind.

A two days walk brings you to the borders of British Burmah. There the mountains are high, covered with forests of big high trees, inhabited by tigers, elephants, deer, jungle fowls, pea-fowls, etc. The rhinoceros is found also, a few months ago the Kariens brought a rhinoceros horn from the jungles and sold it in town for \$80 in gold; it is considered a valuable medicine. Monkeys and parrots are found in great numbers. The tiger, as a rule, does not attack man, if it does it springs on its victim from behind.

Zinc is abundant in the mountains, plenty of it lies on the surface. A European firm has obtained a concession for mining. Although the price of

zinc is not very high and the expense of working the mines large; (the carriage is expensive, there being no roads or railways), yet the profit of the company is a fair one. The low value of silver is a great help to all industries of the east, for they pay in silver, and sell in the London markets in gold. The miners are all Chinamen; a good many die of fever and dysentery and still more run away. The rainy season is very bad in the jungle, the under-brush is thick and the vegetation luxuriant; the trees are high and the sun cannot penetrate through the thick foliage; the ground is wet constantly. There are rich fields of zinc ore, some of them, however, are not accessible except by elephant; and I understand that the company is thinking of employing elephants to carry the ore to a central depot where they will smelt it. At present all the ore is taken to Singapore to be smelted there.

The president of the western Province is now my neighbor, he lives in the inhabitable portions of a palace adjoining my house, in front of it is a beautiful yard with many large shady trees in it. Every day the court is in sitting session, if that is the word for it; and I can see the proceedings from my house. Sometimes I go over to see and observe. At first I could not look at it, but as in operations so also here, one gets used to things. Shooting and cattle lifting and highway robbery were the order of the day until the government woke up to its duty. Well, torture is quite often used to make criminals confess. A pole with a cross piece is stuck into the ground; two bamboo poles fastened together and running parallel to each other are laid on the cross piece. The criminal is made to sit down under the bamboo poles which are separated to let his head pass between two cross pieces; then the two poles are put together again. A string is passed around the man's body and tied to the pole; his hands are joined over the bamboo poles at a point and tied together. The man cannot move now; they leave him to his own thoughts to see whether he will speak the truth. A European could not stand it being compelled to sit there without being able to move head, hands or body. We are so nervous. If the man is stubborn his thumbs are squeezed by means of two pieces of wood which are drawn together by strings; after that those pieces of wood are struck from five to twenty times. Then with a heavy stick his thighs are struck, the head is squeezed in the same manner as the thumbs, the face is struck with a chinese shoe. The rattan is applied to the back and from five to twenty lashes administered. I have seen a man going through it all (it was the second time too) and it took over half an hour. When they let him out he was still able to walk. Others, but very few, I have seen faint away, and lie in a swoon for a long time.

Talking of criminals leads me on to speak of their work as far as I am concerned in it. They are armed with guns and big knives which are used like an ax. The shooting occurs at night from six to nine p. m. I have just now three men here all shot at night. The wound of entrance is mostly on the back. They buy the lead in the market and make the balls themselves, but anything that will pass into the barrel is used; thus, for instance, I cut a screw 1½ inches long out of a man's arm. This is a country place and people are not yet used to foreign physicians as they are in the capital; hence I cannot amputate a man's arm however desirable it might be. One of my patients had his humerus all shattered, and six weeks after receiving the injury he came to me; the head and neck of the humerus are gone, suppurated away. But if I amputate against his will and that of his friends, all the people would avoid me, and no patients would come to see me.

Stabs, I have had only 6 in 18 months.

Cuts are plentiful; cuts of the head with fracture of the outer plate are very numerous, cuts in the wrist joint come next; as a rule one case always represents quite a combination of cuts.

Wounds due to accident, I have had but one, a compound fracture of the thigh. As a rule wounds heal well.

Now as to special affections which call for surgery, I must mention stone of the bladder. I have never had a chance given me to make an examination, but vesical calculus does not seem to be uncommon.

Ascites is frequently met with, about two years ago a case was temporarily cured by spontaneous rupture. Some six months ago I saw the man, the fluid is collecting again.

Hydrocele is quite a common affection, the first man who came to me had been tapped eight times before.

Sebaceous cyst is another common affection, but ganglia are met with still more frequently; they reach the size of a small hen's egg.

Strumous affections (a good term because you can dump into it whatever you please) are exceedingly prevalent among children and people under 40 years of age.

Specific urethritis one can see often, secondary syphilis I see but little; they wait for tertiary symptoms before they consult a foreign doctor. A month ago a man came to see me; he had contracted syphilis five years ago, and was treated by native doctors, never had taken foreign medicines. Now he has locomotor ataxy with all the symptoms according to the books.

The foreign doctor is consulted mostly in surgical troubles. Generally speaking the people have but little faith in foreign drugs; they may take our medicine for four or five days, then if they are not very much better go back to native drugs. In most cases they never consult the foreign physician. Even in burns they wait four or five months and then expect me to remove all the deformity caused by the burn. In cases of consumption they may call you when you are sure that death will take place shortly. A woman next door was sick for three months, the native doctors made the place almost their home. One morning I was called to see the woman, of course I felt pretty sure that she must be far gone, but if they had given me the fee I asked for seeing her (65 cents) I could have gone. But they thought if they could just get some medicine, it would be all they wanted. I did not give them any, the woman died that day, and they couldn't lay the blame on the foreign doctor's medicine.

Cholera we have had ever since December last, in some provinces it was bad. The first cases here, occurred after the rains began. I find enemata of tannic acid the best treatment of cholera; the stage of re-action, however, plays the mischief. Very few cases I see myself, but I have given up pouring drugs down a patient's throat, they are useless. The first case I saw in jail, a horrid place, one of the prisoners suggested that lemon peels were good to draw out the disease; so they left off following the directions I had given and by means of cloth tied the lemon peels to the big toes. In all cases in which I have tried it, the enemata stopped the evacuations within two hours. All my patients, but two, have been in the cold stage when I first saw them.

Wishing you and the INDEX abundant success, I am

Yours sincerely,
E. WACHTER.

Rajaburi, Sept. 16, 1895.

ANALGESIA AND SEDATION—AN ESSENTIAL ADJUNCT TO TREATMENT.

On account of the frequency with which pneumonia in late years is accompanied with grippal symptoms, the treatment, to a great extent, has been modified or changed. The essential features in the result desired are a diminution of the pain and a lowering of the temperature. Opinions differ

as to whether a reduction of the temperature influences the course of the disease, but a consensus of opinion is that *antipyretic* treatment is distinctly called for in the beginning, and an analgesic at all times, if needed to assuage suffering. *The antipyretic should be antikamnia, and the analgesic is supplied by codeine and antikamnia together.* This is given every three or four hours in tablets containing $4\frac{1}{2}$ grains antikamnia and $\frac{1}{2}$ grain codeine, throughout the period of congestion and consolidation. Where there is great restlessness, this will have a delightful effect.

In the nocturnal pains of syphilis, in grinding pains which precede labor, and the uterine contractions which often lead to abortion, in *tic-douleur*, brachialgia, cardialgia, gastralgia, hepatalgia, nephralgia and dysmenorrhœa, immediate relief is afforded by the use of this combination, and the relief is not merely temporary and palliative, but in very many cases curative.

In the neuroses of the respiratory organs, great relief is afforded by the use of this combination. A paroxysm of asthma is often cut short by a full dose; hay-fever or autumnal catarrh is benefited by its use.

In the harassing cough of phthisis, or in the pain of pleuritis, in the painful sensations accompanying bronchitis when the tubes are dry and irritable—as they usually are—the blending of codeine and antikamnia will not be found wanting in its action, but will give results that are gratifying to both the patient and the medical attendant. As a producer of sleep it will be found efficacious. This is doubly true when there is great nervous excitement.

In pulmonary diseases this combination is worthy of trial. It is a sedative to the respiratory centers in both acute and chronic disorders of the lungs. Cough in the vast majority of cases is promptly and lastingly decreased and often entirely suppressed. In diseases of the respiratory organs, pain and cough are the symptoms which especially call for something to relieve; this tablet does it, and in addition controls the violent movements accompanying the cough, and which are so distressing.

This combination is the remedy for diabetes and is superior to any other in diminishing the quantity of sugar in the urine, and also in diminishing the quantity of urine itself in diabetes mellitus. The bulimia and polydipsia are lessened by its use, and probably the changes in the nervous system which accompany or are causative of the disease, are arrested or prevented. It also prevents waste. It controls restlessness; it relieves insomnia; it relieves distressing nervous symptoms. It relieves the craving of the stomach, and lessens the frequency of the calls to urinate.

It is not claimed that the combination will cure diabetes mellitus, but there will be, in many cases, arrest of the disease, with prolonged periods of good health, and cure in some cases.

JOHN J. SULLIVAN, M. D.
University of the City of New York.

266 West 38th St., New York City.

EDITOR INDEX:—An editorial note in the September 10th, issue of the *Medical Age* has just come to my notice. Speaking of my report (in the August number of THE KANSAS CITY MEDICAL INDEX,) of two cases of "Eczema of the Glans Penis," it says: "Dr. William Frick of Kansas City, reports two cases of this somewhat rare affection. He believes them to have been eczematous, merely, but personal experience evidences such are usually an obscure manifestation of syphilis, and more often found when the initial lesion is situated within the urethra." I would like to say in reply that these cases were evidently not manifestations of syphilis, as the following facts will prove. They healed quickly with simple local treatment. There were no other manifestations of syphilis. They took no anti-syphilitic treatment either shortly before, at the time, or since. The appearance of the eruption was that of

a simple, acute eczema. The lesions of secondary syphilis would be dry if the glans were habitually uncovered, or if the glans were covered by a long prepuce, the eruption would partake of the nature of a mucous patch—on account of constant moisture. In tertiary syphilis the lesions would be deeper and most probably ulcerative. Moreover in syphilis there would in all probability be other lesions to tell the tale, and they would not heal so readily without specific treatment.

WM. FRICK, A. M., M. D.

Lecturer on Dermatology, Kansas City Medical College.

Kansas City, Mo., November, 18, 1895.

EDITOR INDEX:

Dear Doctor—The remenant of Dr. J. B. Browning's Medical Library is placed in my office for sale. There are quite a number of standard works with many others. Please announce the above fact in the next issue of the INDEX and oblige,

Yours,

N. A. DRAKE, M. D.

Kansas City, Mo., Dec. 2, 1895.

EDITORIAL.

THE JACKSON COUNTY MEDICAL SOCIETY.

The history of the Jackson County Medical Society is the history of medicine in Kansas City. Founded in 1869 under the name of the Kansas City Medical Society it was afterwards reorganized in 1874 under its present name and for years has been the pioneer society of Kansas City. Among the many men whose fortunes and whose history have been intimately identified with the society we may name: Dr. Jos. Chew, the first president; Dr. E. W. Schauffler, the first secretary; Dr. S. S. Todd, the first vice-president; Dr. A. B. Taylor, Dr. T. B. Lester, Dr. A. B. Sloan, Dr. J. T. Morris, Dr. J. O'Day, Dr. H. C. Morrison, a present member of the upper house of the city council; Dr. Jno. Stark, Dr. A. L. Chapman, Dr. T. J. Eaton, Dr. J. L. Tead, Dr. C. D. McDonald, Dr. E. R. Lewis, Dr. M. A. Bogie, always one of the "wheel horses" and twice president; Dr. C. H. Rieger, Dr. J. D. Griffith, Dr. Geo. Hally, Dr. C. A. Dannaker and Dr. D. R. Porter. Some have left the practice of medicine, some are members still, and some have died.

The society requires that its members shall have resided in Jackson county for one year, that they be graduates of some reputable medical college and that they shall have been in active practice during the year immediately preceding their election. Whatever of good the medical profession as a body have accomplished in this city, has generally been done through the medium of this organization. Everything medical comes before it, both as to practice, policy and medical discipline. Its latest move has been toward a better system of caring for those injured in our streets;—a more satisfactory method of employing the forces we now have rather than the introduction of new ones—and in this move, all will wish it success.

We are pleased to present to our readers the pictures of two members of the society, the retiring president, Dr. Homer Coulter Crowell, who has been

president for the year just ended, and Dr. Louis Willard Luscher, the incoming president for 1896.

Dr. Crowell is well known by his writings and work to many of the readers of the INDEX; he has often contributed to its columns, and is one of our best known gynecologists. He is 44 years of age, and graduated from the medical department of the University of Vermont in 1875. He at once entered practice at Syracuse, N. Y., and continued until in 1887 when he went to New York, remaining there over a year engaged in post-graduate work in his chosen field,—diseases of women. He located in Kansas City in 1888 and has been here continuously ever since.



DR. H. C. CROWELL.

Dr. Crowell is one of the founders of the Academy of Medicine and was its first president, and is the vice-president of the Western Association of Obstetricians and Gynecologists. Under his guidance the society has been exceedingly prosperous and successful.

Dr. Louis Willard Luscher, the newly elected president is an alumnus of the Kansas State University and a graduate in medicine of the Kansas City



DR. L. W. LUSCHER.

Medical College, class of 1879. He is now 38 years of age. He entered active practice in his 21st year at which time he was stationed as a U. S. Army Surgeon at Fort Sill. He remained there until 1882 when he went to South America, and in 1884 went to China and became a surgeon of the Imperial army of China, in charge of the military hospital at North Formosa. In 1886 he resigned his position and completed a tour of the world, reaching Kansas City near the close of 1887. He was married in 1892 and secured that first requisite of a successful surgeon's life,—a perfect wife, gifted and loving.

The increase in the scope and power of the society will entail new and increased duties upon its president for the ensuing year, which Dr. Luscher is well fitted to undertake and successfully carry out.

The society now numbers 138 active members and is in a flourishing financial condition.

EDITORIAL NOTES.

A NEW SIGN OF EARLY TABES.—Dr. James J. Putnam writes in the *Boston Medical and Surgical Journal* that "In a patient with tabes it is often possible to flex the leg at the hip without bending the knee until the toe almost touches the ear without producing the sense of painful tension in the popliteal space so speedily felt by one in health. This is not only an interesting feature of advanced cases but is a valuable early diagnostic sign.

A PRESCRIPTION FOR BRONCHITIS, SUBACUTE OR CHRONIC.—

R Potassium iodide,	-	-	48 grains.
Ammonium chloride,	-	-	2 drachms.
Syrup of senega	-	-	½ fluidounce.
Syrup of lemon sufficient to make	-	-	3 fluidounces.

M. Dose—One drachm every three hours.

A PRESCRIPTION FOR CONVULSIONS IN CHILDREN.

R Chloral hydrat,	-	-	gr. xv to xxx.
Syr. acaciæ,	-	-	fl. ʒj.
Aq.	-	-	fl. ʒ iij.

M. Sig. Inject a tablespoonful into the rectum, and repeat in fifteen or twenty minutes if required. A purgative of some mercurial is always a valuable adjunct when it can be given.

A MARVELOUS FREAK OF NATURE.—The birth of a baby at a certain home in Lebanon last night (Oct 23.) reveals an unusual freak of nature. The child has six fingers and six toes on each hand and foot, all well developed and perfectly formed. The child is perfect in every way with the exception of the extra fingers and toes. It is a fine, large boy and gives promise of long life. Dr. Tayman, the attending physician, discovered the remarkable freak of nature on the child this morning and will watch the case with interest.—*Lebanon Rustic*.

THE TREATMENT OF TAPEWORM.—In the case of an adult male who brought with him, in a glass, segments of a tapeworm (*tenia mediocanellata*) that he had passed by the bowel, and admitted having eaten uncooked beef, Dr. Eshner directed the following treatment, which he has found exceedingly successful in a considerable experience. (*Philadelphia Polyclinic*, July, 20, 1895):

(1) That the man should, for a day, take as nourishment nothing but milk and toast, in small quantities, at intervals of three hours. (2) That at bedtime he should take—

Mercurous chloride	-	-	10 gr.
Sodium bicarbonate	-	-	20 gr.

(3) On the following morning, without arising and without taking food, a half-ounce of magnesium sulphate. (4) An hour later of the following formula, two drachms every fifteen minutes, meanwhile remaining recumbent.

Oleoresin of filix mas	-	2 fluidrachms.
Mucilage of acacia, to make an emulsion.	-	
Syrup of ginger, - to make 1 fluidounce.	-	

(5) And after four hours, if the head of the parasite has not been found in the evacuations, another half-ounce of magnesium sulphate.—*College and Clinical Record*, August, 1895.

CONCERNING ABSCESSSES AND THEIR TREATMENT.—The *Medical World* of Philadelphia publishes the following from the excellent book "Golden Rules of Surgical Practice." "Never try fluctuation across a limb, always along it. Never forget that—

1.—Abscesses near a large joint often communicate with the joint. 2.—Abscesses near a large artery sometimes communicate with the artery. 3.—Abdominal wall abscesses sometimes communicate with the gut or solid viscera.

Never forget that early opening are imperative in abscesses situated: 1.—In the neighborhood of joints. 2.—In the abdominal wall. 3.—In the neck, under the deep fascia. 4.—In the palm of the hand. 5.—Beneath periosteum. 6.—About the rectum, prostate and urethra. To wait for abscesses to "point" or to "burst" in these situations is culpable as well as cowardly.

Remember the frequency with which hæmatomata and traumatic aneurisms have been mistaken for abscesses, and incised with untoward results. Do not open an abscess anywhere near a large artery without first using a stethoscope, and then only by Hilton's method (i. e., scalpel, director and dressing forceps).

Never under any circumstances use for exploratory puncture "that surgical abomination—a grooved needle—for it will allow contamination of all the tissues through which it brings the fluids." (Thorton). Never plunge in opening abscesses; never squeeze the sac after doing so.

Do not forget that your incision should radiate: 1.—In abscesses pointing near the nipple. 2.—In abscesses near the anus. 3.—In scarifying the chemosis of the cornea. And that your incision should be longitudinal: 1.—In the hand. 2.—In the urethra. 3.—On the vertex. Do not forget that incisions for abscesses in the neck and face should run parallel with the wrinkles and folds.

Do not be afraid of hurting the lacteal tubes in mammary abscess. More harm is done to the gland by the enlargement of the walls of the abscess than by a free incision.

Never make a palmar incision except in the middle of the lower third and in the axial line of the fingers or at the sides of the palm.

Do not forget in opening a deep abscess in the lumbar region without the projection of the abscess, to cut down opposite a transverse process, not between them, for fear of wounding a lumbar artery.

SOCIETY PROCEEDINGS.

THE JACKSON COUNTY MEDICAL SOCIETY, OF KANSAS CITY, MISSOURI.

(ORGANIZED 1874.)

ENROLLMENT, 139 MEMBERS.

LOUIS W. LUSCHER, M. D., *President*.

JOHN B. MITCHELL, M. D., *Secretary*.

H. O. HANAWALT, M. D., *Vice-President*.

CHARLES A. DANNAKER, M. D., *Treasurer*.

ANNUAL DUES \$3.00.

MEMBERSHIP DUES (paid but once) \$5.00.

Meets second and fourth Thursdays of each month, at 916 Walnut Street, at 8 p. m.
Visiting Physicians Welcome.

DR. THEODORE W. SCHAEFER presented to the Jackson County Medical Society at its meeting November 14th, a paper on certain chemical compounds obtained by the union of phenol derivatives with isomerides and polymerides of camphor. Dr. Schaefer speaks of resorcene camphor, thymol camphor, mentho-phenol and other substances of similar kind. Dr. Schaefer set forth

that 10 years ago he had written a paper calling attention to the union of carbolic acid, a solid, and gum camphor, forming a fluid with marked medicinal properties. This, if true, would make Dr. Schaefer the real discoverer of campho-phenique. Dr. Schaefer's chief object in his paper was to direct the attention of those interested in medical chemistry to the large number of compounds that can be produced by the action of the substances above mentioned.

The call for the meeting of the Jackson County Medical Society on the evening of November 21 had been made under the impression that the Western Gynecological Association would be holding its session on November 28, which was the regular time for the Jackson County Society to meet. Owing to the misunderstanding about dates, the society's president declared that there was no business before the meeting and the society adjourned. The members present participated in a pathological meeting arranged by Dr. A. H. Cordier.

The meeting of the society on the evening of November 28 was not largely attended owing to Thanksgiving observance.

Dr. E. Von Quast exhibited a case of compound comminuted fracture of the tibia and fibula. His paper was deferred until the meeting of December 19th.

No meeting was held on the evening of December 13 in order to give all members an opportunity to hear Dr. Sach's lecture.

THE KANSAS CITY ACADEMY OF MEDICINE.

(ORGANIZED 1880.)

ENROLLMENT, 68 MEMBERS.

JOHN PUNTON, M.D., *President.*
V. W. GAYLE, M.D., *Vice-President.*

JOHN W. KYGER, M.D., *Secretary.*
CHARLES LESTER HALL, M.D., *Treasurer.*

ANNUAL DUES, \$4.00.

MEMBERSHIP DUES. (paid but once) \$10.00.

Meets every Saturday evening at eight o'clock, in Parlor S, Midland Hotel.

Visiting Physicians Welcome.

REPORT OF THE COMMITTEE ON THE TREATMENT OF DIPHTHERIA BY ANTITOXIN.

To the Academy of Medicine, Kansas City, Mo.:

We the Committee on the Antitoxin Treatment of Diphtheria beg to submit the following imperfect report:

We wish to state that we found it difficult to get a report succinct and sufficiently elaborate to satisfy ourselves in our earnestness to correctly estimate the value of the serum treatment.

Furthermore a difficulty is encountered in comparing the varied statistics of different observers, and the varied and combined treatment used by said statisticians simultaneously with the antitoxin.

It seems to the committee that there are two insurmountable obstacles to definitely decide the value of antitoxin, namely: 1st. A want of an absolute diagnosis of diphtheria. 2nd. The unjustifiableness, in the present condition of our knowledge, of using this remedy to the exclusion of other treatment. To make cultures in anything like a disseminated manner over the country would with our present facilities, or the want of them, be impossible, to examine the membrane direct with the microscope even though the Klebs-Loeffler bacillus were found, would not in the opinion of many prove the presence of diphtheria, as it is claimed by some high in authority that this special bacillus is often found in healthy throats.

To counteract the first objection Prof. Welch, of the Johns Hopkins University contends that we should not wait for the discovery of the bacillus but rely upon clinical evidence, as much depends upon using the serum early in the disease; that is the second or third and even the first day when possible.

At this juncture the committee would respectfully call your attention to the two possible ways the antitoxin may act towards staying the progress of diphtheritic action as given by Prof. Welch.

The first way is what is styled by this distinguished student "the chemical (action or) theory" by which is meant, that the antitoxin by direct chemical action, destroys the germs and their toxins, by a process of disintegration and neutralization. The second, and Prof. Welch thinks the more probable one, is "the vital theory." This latter theory is explained in this manner. The antitoxin coming in contact with the cells of the body, endues them with such resisting power, as to hold in check diphtheritic action. It may, therefore be termed a vitalizing action to cells, carrying a heavy load of toxins.

So numerous are the reports (most of them favorable to antitoxin) from all over the civilized world, that the committee will only give the observations of a few statisticians, of recognized ability.

It may be well to say that the era of serum treatment of diphtheria, really began in April, 1894. At this date Elerlich Kossel and Wasserman, reported the results of serum treatment of 220 cases in six (6) Berlin hospitals, the inception of the treatment dating back to June, 1893. These, with additional ones making a total of 233 cases, were more fully reported by Kossel in July, 1894—with a mortality of 23 per cent. In these cases a much weaker serum was used than is now advised, as was also Behring's serum before this time (that is before June, 1893.) The solutions from the discovery to the present have been from time to time of increasing strength. Since August 1st, 1894, Behring's serum has been for sale.

We must, however, remember that it is scarcely more than ten months, since the antitoxin was used, except by a favored few, and a much shorter time that its use has become at all general. In so short a period, however, there have been published more or less definite reports of 15,000 cases. In France up to December 1895 there had been treated 2700 with a mortality of 16 per cent.

In the Berlin hospitals 1500 cases have been treated with a reduction in mortality of one-half. Prof. Welch in the Johns Hopkins *Bulletin*, of August, last, reports 7166 cases treated with antitoxin with 1239 deaths, or 17.3 per cent.

The previous or simultaneous fatality of cases not treated by the serum embraces 46 reports. These contain 5406 cases treated with antitoxin with 1008 deaths or 18.6 per cent.

Estimating the number of deaths in these cases upon the basis of the previous or simultaneous fatality for each group there would have been 2279 deaths or 42.1 per cent., an apparent reduction of case mortality by the use of antitoxin of 55.8 per cent.

Taking the number of cases reported to the Board of Health weekly as recorded in the New York *Medical Record*, kindly furnished by our friend Dr. Cordier, they aggregate for the year 1894 (or that portion of it obtained) 4940 cases of diphtheria with total deaths 1325, or a mortality of a fraction over 26 per cent.

The number of cases recorded thus far in the year 1895 in New York City is 6689 with 1220 deaths or a mortality of 18.3 per cent.

To have made this complete, or more so at least, corresponding months of the year 1895 to those of '94 and even '93 should have been given.

We can clearly see, however, from even this rough estimate by taking total averages that from some cause the mortality seems much on the decrease. In the reports it is conspicuous that it is not stated when serum was used or not in these cases. It is fair to presume however, that those cases recorded in 1895 were treated with the

serum while those of '94 were not, or but few of them. The above report is only intended as a very rough approximation at correctness.

It does not mean much but in our very casual researches over such literature as was afforded us we recorded the number of cases and deaths in New York City during following years.

We think this was obtained from the New York *Medical Record*.

In 1880—3370 cases, mortality	-	-	42	per cent.
1881—5207 “ “	-	-	42.6	“
1882—3507 “ “	-	-	43	“
1883—2906 “ “	-	-	34	“
1884—2201 “ “	-	-	49	“

In taking reports so far back, and comparing them with those even of 1894 when we found the mortality to have been a fraction over 26 per cent., it would indicate a diminution in the degree of mortality, even aside from (to say the least) an extended use of antitoxin.

Prof. Welch from a report of 38 groups, gives the total number of cases collected by him of those treated with antitoxin as 4294, out of this number there were 784 deaths, or 18.3 per cent. Of these there were 3127 wherein tracheotomy was not performed attended by a mortality of 350 or 11.2 per cent. There were 1167 cases in which the operation was performed attended with 434 deaths or 37.2 per cent.

In the *Medical Review*, of October 26, 1895, we note a report from a Russian observer where in a certain district of that country there occurred 109 cases, proved bacteriologically, to have been diphtheria; antitoxin was used and the mortality was 12.8 per cent. Previously, the same observer states, the mortality had been under the old forms of treatment 48 per cent. At this time it was used as a preventative on 222 healthy children, and none of them contracted the disease.

Reference is made in the *Medical Review*, of October 19, to the articles of Drs. Welch and Behring and in this connection states that 202 cases with antitoxin were attended by a mortality only of 2.2 per cent., where the treatment was used on the 1st day of the disease. 456 cases treated on second day the mortality was 8.1 per cent.

311 cases treated on 3rd day,	19	per cent.
168 “ “ “ 4th “	19	“
116 “ “ “ 5th “	29.3	“
44 “ “ “ 6th “	34.1	“
104 “ “ after 6th “	33.7	“

Prof. Welch says he is not aware of a single fatal case of diphtheria where the serum was used during the first 24 hours of the disease if used properly. Behring reports 5833 cases of diphtheria treated with antitoxin in hospitals and private practice, from October 1st, 1894 to April 1st, 1895, of which 9.6 per cent, died. Of this number 1442 had been treated in the hospital where the mortality was 14.6 per cent. 4391 in private practice with a death rate of only 7.9 per cent.

We are to assume that the efficacy of the treatment is in direct ratio of its early use, going beyond the third day its great value at least seems questionable.

It is well to observe that in simple diphtheria antitoxin plays its most important role. Its use in mixed infections, or where we have nephritis, paralysis or heart failure, already attending the disease as complications, little can be expected. It seems to possess little if any power in restoring tissue broken down or even in the active process of so doing,—hence the necessity of its early use.

Behring calculates that each 100 million of inhabitants of the globe should have 400,000 healing doses and an equal amount for immunizing purposes. During the year ending September 1st, 1895, there was an out-put of serum by all firms of 800,000 healing doses as recorded in the *Medical Review*, of October, 1895.

In conclusion we wish to state that Prof. Biggs of New York claims that the mortality can be reduced 40 per cent. by the antitoxin treatment, and also at the

British Medical Association of recent date the consensus of opinion was strongly in favor of serum therapy in diphtheria.

Its early use of a genuine article in an uncomplicated and proven case of diphtheria according to the great majority of our closest observers, and those most competent to judge, seems to lend like encouragement towards the extermination of this dread disease—diphtheria—that vaccine does to variola.

We have purposely avoided detailing the experience of local physicians expecting their observations would be brought out in the discussion. We would, however, state that we are not at all unmindful of their great value and trust that these together with the records and personal experience of those connected with the City Board of Health will greatly add to the significance of our meeting.

We would further state that the consensus of opinion with reference to the serum treatment of diphtheria would seem to warrant steps taken immediately to increase the facilities for its easy access to the masses of physicians all over the land.

Thanking you for your kind attention, and trusting inaccuracies and the incompleteness of this report will be excused.

We respectfully remain,

Signed: C. LESTER HALL, M. D.
C. E. RITTER, M. D.
V. W. GAYLE, M. D.
C. F. WAINRIGHT, M. D.
C. B. Hardin, M. D.

Committee.

P. S.—Since the above, we examined the November issue of the *American Journal of Medical Sciences* and find therein a report from the city of Berlin. The report says that out of 5833 diphtheritic cases treated with antitoxic serum there was a mortality of 9.6 per cent. and that 4479 cases without serum treatment there was a mortality of 14.7 per cent.

The identity of diphtheria and membranous croup as taught by Osler and other authors, would necessarily make the foregoing statements and figures equally applicable to the latter disease.

Those advocating such a doctrine would have us believe that the condition commonly known as membranous croup is really laryngeal diphtheria, and if so no distinction is to be made in the use of the antitoxic serum.

We desire stating before closing that at least one prominent member of the committee expresses himself as believing that the virtue of the serum lies in its nuclein. By thus affording a stimulus (at least) to the increased manufacture of cells (possibly leucocytes) it affords to the economy an extra and oft-times victorious element of strength over the diphtheritic germs—the process being known as phagocytosis.

Our report would scarcely be complete without a reference to some of the alleged toxic results as encountered by some observers in the use of the serum. Some claim, as stated by Welch, that as many as fifty per cent. of cases treated are attended with diseased symptoms produced by the injections. Others, that these untoward results occur only in five per cent. The most usual ones are some form of an exanthem, such as erythema simplex or erythema multiforme. Sometimes an articular rash appears, resembling measles or scarlatina. These eruptions may be marked by high fever, painful joints, and other constitutional effects, though Welch claims they all disappear, in the vast majority of cases, without bad results, and the danger of using a genuine article is practically nothing. Behring testifies in like manner. Professor attributes these unpleasant, though not dangerous results to faulty serum and not to its curative properties.

An unusually large attendance was present at the meeting of the Academy of Medicine on the evening of November 2. The occasion was the hearing of the report of the committee on antitoxin. The report was read by Dr. C. H. Hardin. It appears elsewhere in this issue. A lengthy discussion followed.

DR. J. M. ALLEN, of Liberty complimented the committee's report. In 20 cases of diphtheria he had used antitoxin treatment and in none of them were there any unfavorable results. Beneficial results were derived even where there was much albumen in the urine and the cases were considerably advanced. Twenty-five minims at a dose 3 times a day was given. On the fourth day no trace of the membrane was left. At another time he had used antitoxin in the case of a family of eleven children, two women and two men living in a two room house in the Missouri river bottoms. Two children had died before he was called, and two more had been under the influence of the disease 45 hours. In two days the disease had abated and recovery was established. A third child was seized by the disease six hours before the arrival of Dr. Allen and Dr. Morton, of Missouri City. Immunity was obtained for the other children by injecting them. Another case of 24 hours standing—a girl of ten years—was given 40 minims twice a day. The case was a severe one. The treatment was continued three days when the membrane twisted, the temperature subsided. The membrane disappeared in 6 or 8 days. Another child in the family 6 years of age, was taken but was treated with antitoxin and did not go to bed. The action of the serum, Dr. Allen believed, was to attenuate the diphtheritic virus. The immunity effect he thought was obtained by the action of the antitoxin attacking and destroying or removing the element in the system on which the diphtheritic germ lives.

In answer to a question put by Dr. LeRoy Dibble, Dr. Allen said that culture had been made in one case.

DR. EMORY LANPHEAR, of St. Louis, believed that cases were frequently erroneously diagnosed as diphtheria when they were not. He did not disbelieve in antitoxine but thought it best to stick to time tried remedies and not to depend exclusively on antitoxin.

DR. C. LESTER HALL said he was of the committee but the credit of the report was due Dr. Hardin. He believed that the matter should be approached with caution but he thought that the treatment of diphtheria should not be solely and entirely abandoned to antitoxin. The trouble lies in making the diagnosis. He thought that not all the cases reported in the statistics were diphtheria. A constitutional or an acquired immunity was the foundation of success. Dr. Victor Vaughn was treating diphtheria with nuclein and he considered this the coming treatment and the proper one. Diphtheria he believed was not as contagious as it was generally thought to be. He considered Dr. Allen's doses too small for immunizing effect.

DR. J. C. ROGERS agreed with the paper.

DR. C. F. WAINRIGHT was open to conviction, but thus far was not convinced concerning antitoxin. His experience was just the reverse of that of Dr. Allen.

DR. H. O. LEONARD reported that out of 75 cases of sore throat he had diagnosed 8 of diphtheria and had used antitoxin. Of these 5 recovered and 3 died. He was a believer in antitoxin.

DR. C. A. RITTER believed that antitoxin was on the witness stand. The general practitioner and not laboratory men would decide. Most cases of diphtheria he believed were seen to late for antitoxin to be effective. Dr. Ritter believed in using antitoxin but would not trust all to the serum but would also use whiskey and strychnine. He endorsed Dr. Allen's report but considered him bold in trusting to antitoxin alone.

DR. M. A. BOGUE thought there was no mistake about Dr. Allen's diagnosis and treatment. He believed that iron, strychnine and other drugs might antidote the antitoxin, if used in connection with it.

DR. V. W. GAYLE was open to conviction like Dr. Wainright. He thought that mistaken diagnosis of diphtheria were made and that cases were diagnosed as diphtheria that were not. Of all the cases diagnosed as diphtheria 70 per cent. were not, 50 per cent. would die notwithstanding any treatment.

DR. JOSEPH SHARP stated that he did not like to see men cast doubt on other men's diagnosis. He was a believer in antitoxin and submitted figures showing great reduction in the death rate in diphtheria cases resulting from the use of antitoxine.

DR. R. T. SLOAN said, "An old war horse like Dr. Allen does not need any defense but I want to compliment him on his treatment and results. His experience is ample to diagnose diphtheria." Dr. Sloan believed that careful experimentation should be made by every physician. He doubted if Dr. Allen observed attenuation of bacilli. If a physician did not use antitoxin in the treatment of diphtheria he was guilty of criminal negligence. He did not, however, believe it a cure all.

DR. GEORGE M. GRAY had used antitoxin in 9 cases, 7 of certain diagnosis of diphtheria and 2 doubtful. All 9 recovered. One was a case of intubation and one of intubation and tracheotomy. The tube had to be retained in the throat for a long time. In one case ten days was necessary.

DR. J. W. KYGER said he believed the antitoxin treatment to be already beyond the experimental stage. He cited Prof. Welch's favorable conclusions in 7,000 cases where antitoxin was used and no more bad results were obtained more than those obtained in the use of chloroform. He believed there was no question but that the cases reported by Dr. Allen were diphtheria.

DR. B. H. ZWART said "When bacteriologists can make a diagnosis of our cases before our patients are under ground then I will believe them. I would certainly rather trust Dr. Allen's diagnosis than that of the average microscopist."

DR. LEROY DIBBLE said that the only thing that lied like statistics, was statistics. He did not condemn antitoxin but did not believe that its efficacy had been proven.

DR. E. P. WARING exhibited a report showing great diminution in the diphtheria death rate of Kansas City, of which he was health officer, from the use of antitoxin.

DR. HERMAN E. PEARSE said what cases he had treated as diphtheria were diphtheria. The microscope is useful but the bacteriological diagnosis rests with the culture tube. The diagnosis could also be made clinically. The croupous and diphtheritic membrane he considered the same. He had always seen cases of laryngeal diphtheria treated, by the old methods, die. Two cases he had recently treated by antitoxin recovered. Continuing he stated that he believed in antitoxin because it cured cases of diphtheria that formerly were pronounced incurable. He had used the New York Pasteur Institute serum, but lately had used the Parke, Davis & Co.'s serum and was pleased with its action.

DR. C. M. FULTON had seen enough to convince him that antitoxin had come to stay.

DR. HAL W. FOSTER, a former student of Prof. Welch, had recommended the use of antitoxin in 10 cases, several of them in Kansas. He was much pleased with the results obtained from antitoxin and cited a case where he intubated and in consultation with Dr. Singleton used antitoxin.

DR. C. M. CARTER said he had been a "doubting Thomas" on antitoxin but after hearing the testimony offered during the evening was compelled to believe.

DR. J. M. ALLEN closed the discussion.

It was then announced by the chairman that Dr. B. Sachs of the New York Polyclinic would visit Kansas City, December 11th and 12th, as a guest of the Academy. A committee was appointed to attend to his reception and entertainment.

At the meeting held November 30th, Dr. JACOB BLOCK reported a case of renal calculus in which the stone had occluded the ureter and in which there was great pus formation in the kidney. Operative interference relieved the trouble.

DR. S. G. GANT reported a case of horse shoe fistula of the rectum in a patient of 36 years of age. He made all the sinuses connect one with the other by an incision about 12 inches in length and then made but one incision through the sphincter.

At the meeting of the Academy, December 7th, Dr. C. Lester Hall was, on motion of Dr. Hal Foster, called to the chair in the absence of the president, Dr. John Puntton. Dr. W. F. Morrow who was elected to membership at the preceding meeting was received. The minutes of the previous meeting were read and Dr. Hall stated, concerning Dr. Block's paper, that he objected to Dr. Block's method of giving consultant's individual opinions before the society in open session in a paper. The Academy approved his position.

DR. J. N. JACKSON was on the programme of the present meeting for a paper on "Injuries to the Head," but was absent and his paper was not read.

DR. B. E. FRYER presented a young man of 20 years who was injured over the right upper portion of the frontal bone, on July 25, 1895, by being struck by a wheel-like piece of machinery in a plating factory. A scalp wound with a fracture resulted and this was treated according to the usual methods by physicians who were called at the time, and there was apparent recovery with no mental nor motor reflexes. About a month ago the sight of the right eye became impaired and disappeared so that now the case presented was one of virtual unocular blindness, although the patient could see just a little toward the nasal side of the eye. Dr. Fryer diagnosed the case as that of fracture extending into the orbit with a lesion of the optic nerve between the ball and the chiasm.

Drs. Grove, Bellows, Zwart, Sloan, Austin, and Cordier discussed the case.

DR. R. T. SLOAN then reported a case of peri-metritis following abortion and accompanied by a variety of symptoms in other organs, and a pronounced melancholia. After several months of unsuccessful internal and local treatment the case was cured by uterine massage. The melancholia persisted for a time and was finally dispelled by suggestion.

DR. J. W. KYGER reported the case of an infant girl of one year who had driven a knife over the right eye by a fall. Hemorrhage was profuse. Another physician who was first called washed the wound with boracic acid and put on a strip of adhesive plaster. The child apparently recovered. In 24 hours vomiting and fever resulted. Dr. Kyger prescribed calomel, gelsemium and aconite. The child died in a convulsion 26 hours after receiving the wound. A probe showed that the wound had penetrated the brain under the orbital plate of the frontal bone. The family objected to Dr. Kyger's probing when he was first called and on that account it was abandoned.

The case was discussed and the general impression was that the cause of death was meningitis.

OBITUARY.

A FEW WORDS OF COMMENDATION ON THE LIFE OF DR. H. C. GARNER, BY THE PHYSICIAN'S CLUB OF KANSAS CITY, MO.

The secretary of the Physician's Club was instructed by its members to prepare and publish a short article relative to the loss sustained and the regret felt in the sudden death of one of our valued co-laborers, Dr. H. C. Garner, of this city. The Doctor had been a member of the above association from its inception (two or more years) and his matured counsel and active participation in the promotion of its interests and growth were early recognized. While his infirmities incident to age and long service sometimes kept him away from its meetings, we always felt that his indorsement in the society's welfare was ever present.

Shortly before his death, which occurred December 10th, he was assigned the duty of writing an essay for the Club on the subject of "Forty years in Medicine." Doubtless this request was partially or wholly complied with previous to his demise though never read. From quite an intimate acquaintance with the Doctor we feel warranted in saying that a truer, braver man never adorned the medical profession, nor one more conscientious in the discharge of its onerous duties. As to his intellectual competency and adaptability to his vocation, his long allegiance to the work, and his financial success, abundantly attest. With such qualities of mind and heart we feel in his death an almost irreparable loss, not only to the Club—but to all in, and out of the profession, who were so fortunate as to know him, so efficiently did he serve in the great drama of life. While at variance with the usual form of passing resolutions, we desire it understood that the above manner was deemed the more fitting and is essentially the expression of every member of this Club.

C. B. HARDIN, Sec'y.

Kansas City, Mo., December 19th, 1895.

LITTLE ITEMS.

London uses about 195,000,000 gallons of water each day.

Another new medical journal is about to appear at Kansas City.

Dr. Frank P. Norbury will return to his practice at Jacksonville.

We opine many will not forget the visit of Dr. Sachs to Kansas City.

Dr. C. Lester Hall, has resigned from the faculty of the Woman's Medical College.

Dr. Geo. J. Engleman has removed from St. Louis to 336 Beacon Street, Boston, Mass.

Dr. Hunter Robb is hereafter to be found at 1342 Euclid Avenue, Cleveland, Ohio. Hours 2 to 3.

Dr. Eastman's address was erroneously given as Chicago last month. It should have been Burlington, Kas.

We desire to thank the members of the Missouri Press Association for the many kind and complimentary notices of the INDEX.

Dr. C. E. Ewin, of Independence, Mo., who lately practiced in Kansas City, died of peritonitis following acute dysentery, December 8th.

We have grown from a 64 to an 80 page journal—600 pages of reading matter for 1896, and more if all goes well. Thus grows the INDEX.

There have been since October 22nd 91 cases of cholera in St. Petersburg with 45 deaths, and 28 cases now (Nov. 21st.) under treatment.

Our Dr. R. P. Waring has been elected third vice-president of the National Sanitary Association which met at Atlanta, Ga., October 23rd, 1895.

Dr. Cornelius O'Connor is at St. Joseph's hospital suffering from a perforating ulcer of the cornea. What the outcome of the trouble will be is not yet known.

Aunt Almira.—“What an awful noise that cat makes.”

Tommy.—“I guess you would make a noise too if you was as full of fiddlestrings as he is.”

Our reader's attention is called to the letter from Dr. Drake, appearing under “communications” in this issue. It is desired that disposition be made of the books mentioned.

The “Pathological meetings” of the Jackson County Medical Society have been resumed. Dr. Cordier has charge of the programmes and they are a most interesting feature of the society.

Parke, Davis & Co., have reduced the price of their diphtheria antitoxin to \$2.25 per bottle of 1,000 units. They aim to sell always at cost, and the spirit is a commendable one—well becoming that excellent firm.

Mrs. Lynn Linton contributes an entertaining paper on “Cranks and Crazes” to the *North American Review* for December. In it she attacks the various fads of the day, showing the tenacious hold some of them have acquired upon the men and women of the period.

Dr. B. Sachs, of New York, made Kansas City a pleasant visit December 12th and delivered a lecture on “Syphilis of the Nervous System,” as a guest of the Academy of Medicine. The doctor's lecture was a learned and enjoyable one and was listened to by about two hundred physicians. He visited St. Louis on his return trip.

One of the subscribers to the INDEX writing from London, England says: “These fellows have their laws so fixed that they prohibit all except graduates from English schools from practicing. We need something similar at home. If protection is good for the English doctor and the American manufacturer, why not for the American doctor?” This is food for reflection.

The Tri-State Medical Society (Iowa, Illinois and Missouri) held an interesting session at Des Moines, October 2 and 3. The following officers were elected: President, Dr. D. C. Babcock, Chicago; first vice-president, Dr. A. H. Cordier, Kansas City; secretary, Dr. George Cole, Keokuk; treasurer, Charles Case, Waterloo. The next meeting will be held at Chicago in April next.

The *Western Medical Reporter* says: “The annual meeting of the Southwest Kansas Medical Society met at Wichita, November 19th, and elected the following officers: Dr. Shelly, of Mulvane, president; Dr. Horuiday, Rocks, vice-president; Dr. Polk, Augusta, 2d vice-president; Dr. Hoffman, Wichita, secretary; Dr. Furley, Wichita, treasurer. The physicians of Wichita tendered the Association a grand banquet, at which 400 were present.”

We are warned of the departure of the old year and the advent of the new by the receipt, from Messrs. P. Blakiston, Son & Co., of Philadelphia, of the “Physician's Visiting List for 1896.” This well known Visiting List presents several improvements in the new edition for 1896. More space has been allowed for writing the names and to the “Memorandum Page,” a column has been added for the “amount” of the weekly visits and a column for the “ledger page.” To do this without increasing the bulk or price, the reading matter and memorandum pages have been rearranged and simplified. The lists for 75 patients and 100 patients will also have special memoranda pages as above, and hereafter will come in two volumes only, dated January to June, and July to December. While this makes a book better suited to the pocket, the chief advantage is that it does away with the risk of losing the account of a whole year should the book be mislaid. The publishers announce that before making these changes they have personally consulted a number of physicians who have used the book for many years, and have taken into consideration many suggestions made in letters from all parts of the country. No visiting list has been used to such an extent or for so long a time as this. There is none better suited to the work of the general physician, in keeping easily and systematically his business accounts and memoranda.

The Tsarita, it is said, has the courage and the ability to dispense with the services of a wet nurse. She will disregard the dictates of fashion and nourish her own infant daughter. It is said she is the first Empress of Russia who has ever done so. She is a grand-daughter of the Queen of England, who, true to the home instincts of the English race, knit six petticoats for the new princess, with her own hands and sent them to her royal great-grand-daughter.

The mid-winter meeting of the Golden Belt Medical Society will be held in Abilene, Kansas, Thursday, January 2, 1896. There will be an afternoon and evening session. The following programme has been provided, to which the profession is cordially invited: Osteomyelitis, Dr. J. C. McClintock, Topeka; Fibroid Tumors of the Uterus, Dr. P. Daughterty, Junction City; Does the Necessary Degree of Anesthesia Favor Post-Partum Hemorrhage, Dr. W. S. Harvey, Salina, Kas.; Nephritic Abscess, Dr. J. Block, Kansas City, Mo.; Metritis, S. E. Sheldon, Topeka.

READING NOTICES.

You can have a beautiful book, finely illustrated, free of expense, if, remember, if, you mention the MEDICAL INDEX and write to Chas. S. Fee, agent, N. P. R. R., St. Paul, Minnesota, and ask for "Sketches of Wonderland." It is a beauty—the book.

We call the attention of our readers to the advertisement of the Robinson-Pettet Co., Louisville, Ky., which will be found on another page of this issue. This house was established fifty years ago, and enjoys a widespread reputation as manufacturers of high character. We do not hesitate to endorse their preparations as being all they claim for them.

DR. THOMPSON'S RECOGNITION OF MALTINE.—From the new work on "Practical Dietics," by W. Gilman Thompson, M. D., Professor of Materia Medica, Therapeutics, and Clinical Medicine in the University of the City of New York, Visiting Physician to the Presbyterian and Bellevue Hospitals, etc., we quote, pages 142 and 143: "Diastase is a vegetable ferment which has the property of converting starchy foods into a soluble material called maltose. Like the ferments in the saliva and pancreatic juice, it acts in alkaline solution, but, unlike them, it continues to operate in acid media and, therefore, its action is not disturbed by the gastric juice. Diastase is a peculiar substance which causes the ripening of fruits and vegetables and by converting their starches into dextrins and sugars; hence fruit becomes more and more digestible as it ripens.

Maltine is made from three cereals—barley, wheat and oats. *It is rich in diastase*, It may be taken either plain, with cod liver oil, with coca wine, with pancreatin, with hyphosphophites, etc., in tuberculosis and other diseases."

Cordial Pas-Carnata contains the active medicinal principal of Passion flower, in combination with pure California wine and aromatics, and is the original introduction of the Wm. S. Merrell Chemical Company at Cincinnati.

As all the products of this Company are prepared for the use of the profession only, they do not follow the usual custom of publishing testimonials, many of which, as is well known, are overdrawn and in many cases fictitious.

The following letter, however, coming from one of the leading druggists of New England and from a section of country in which the drug is almost unknown lends more than a passing interest to this valuable preparation.

DARTMOUTH PHARMACY.

Established 1798.

L. B. DOWNING, Box 444.

HANOVER, N. H., July 17, 1895.

WM. S. MERRELL CHEMICAL CO.,

GENTS:—In June I ordered your Fl. Ext. Passion Flower as an experiment for a son of 12 years, who has made very rapid growth and was at the time very nervous, and several physicians had tried in vain to help him, one an uncle in whose family he stayed for a month. My wife happened to see your circular on Pas-Carnata, and on consulting the doctors who had treated him, they said "By all means try it."

The result was truly marvelous.

There was a change for the better in four days. Facial and shoulder muscles were twitching when we commenced using it. In a few days they disappeared and on 15 drop doses three times a day, he keeps all right apparently.

I shall speak a good word for the medicine, as I have already done. Will you please send me some circulars to give to my physicians. Very truly yours,

L. B. DOWNING.

The neatest, most tasty, and withal the best executed advertising matter that the INDEX office has received, comes from the offices of the Peacock Chemical Co., who have sent out brochures on "The Liver," and "Congestion," from the Sultan Drug Co., "Restored Nutrition Increases Weight," and from the Rio Chemical Co., "Stimulation without Reaction" and "The Mucous Astringent." All these companies are in St. Louis and will send the above on application,

SPERMATORRHEA.—Having a case of spermatorrhea of several years' standing, which came under my care about nine months ago, I prescribed the usual remedies in this case, viz: bromide potash, ergot, ferrum, digitalis, belladonna and cimicifuga, with very unsatisfactory results. Seeing your preparation, Celerina, recommended for this affection, I procured some, and administered it in this case with such marked results after the use of the first bottle, that I immediately ordered two more bottles, which have entirely cured him of this affliction. I have two other patients now under treatment with Celerina which are progressing very favorably. After a practice of twenty-nine years I have no hesitancy in saying that it is the most effectual remedy that I have ever prescribed in the above disease.

Quarryville, Pa.

H. E. RAUB, M. D.

FIFTY-TWO DIVIDENDS.—As a general thing investors are pleased to receive only two dividends a year, and if they are paid with regularity are fully satisfied. When one, however, can receive fifty-two dividends in a year upon an investment of only three dollars, the matter deserves very serious attention.

The *Independent* of New York for forty-seven years has held the first position among the great religious literary and family weeklies of the land. It presents features for the coming year far in advance of any heretofore offered. It has the leading contributors of the world, it prints the best poetry, it has twenty-one departments, edited by specialists, devoted to Fine Arts, Science, Insurance, Finance, Biblical Research, Sunday School, Missions, Health, etc. The *Independent* is particularly fitted for intelligent people, whether professional men, business men or farmers, and for their families. It costs but six cents a week, and gives a great deal for the money. A subscriber receives fifty two dividends a year.

The subscription price of the *Independent* is only three dollars a year, or at that rate for any part of a year, and a sample copy will be sent to any person free by addressing the *Independent*, New York City.

LACTOPHENIN. ANTIPYRETIC AND ANALGESIC.—In Sajous' Annual (1895) of the Universal Medical Sciences, Dr. Dujardin-Beaumetz, editor of the department of Therapeutics (Vol. V, A, page 91), gives this estimate of the therapeutic availability of lactophenin.

LACTOPHENIN.—This substance is allied to phenacetin both chemically and therapeutically. It is a crystalline powder, with a somewhat bitter taste, and is very slightly soluble in water. According to Landowski, who tried it in Proust's clinic,¹ it acts precisely like phenacetine when both are given in 0.6 gramme (9½ grains) doses, but 1 gramme (15½ grains) of lactophenin produces a decided hypnotic effect. Von Jaksch², who employed it in doses of from ½ to 1 gramme (7½ to 15½ grains) in typhoid fever, found that it always rapidly reduced the temperature, and also that it exercised a calming effect when there was restlessness or delirium. Jaquet, of Basel,³ employed it in pneumonia, erysipelas and influenza, and found it nearly always reduced the temperature rapidly and for some considerable time without any serious symptoms being produced; especially there was never any weakness of the heart's action or of respiration, nor any dyspnoea or collapse observed, and the pulse, as a rule, became fuller and slower, while the breathing remained unaffected. The great advantage of this drug appeared to be its calming hypnotic effect, together with its reduction of the fever. The hypnotic value of lactophenin Jaquet estimates as intermediate between that of sulphonal and urethane. The usual dose employed by him was from 0.5 to 0.7 gramme (7½ to 10½ grains). H. Strauss⁴ tried the drug as an antipyretic in twenty-five cases, finding it preferable to any other on account of its harmless nature. In typhoid fever it seemed to have a special calmative effect on the nervous system. Roth⁵ used it in several cases of acute rheumatism, finding it equal to the salicylates. The pain and swelling disappeared within twenty-four to forty-eight hours, the temperature continued low, and no unpleasant effects were observed, though large doses were given

¹*Lancet*, London, April 21, 1894.

²*Centralblatt für Gynäkologie*, Leipzig, Nov. 14, 1894.

³*Correspondenzblatt für Schweizer Aerzte*, Basel, May, 1894.

⁴*Therapeutische Monatshefte*, Berlin, Sept. 1894.

⁵*Wiener klinische Wochenschrift*, Vienna, Sept. 1894.

TWENTY-SEVENTH
ANNUAL ANNOUNCEMENT
OF THE
Kansas • City • Medical • College
KANSAS CITY, MO.
SESSION OF 1895-'96
AND
CATALOGUE • OF • STUDENTS
OF THE SESSION OF 1894-'95.

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- WM. FRICK, M. D.,
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W. T. WHITE, M. D.
Assistant in Histological Laboratory.

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ASSISTANT.

F. E. MURPHY, M. D.

SURGICAL SERVICE.

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S. H. RAGAN, M. D.
B. H. WHEELER, M. D.

DISEASES OF EYE AND EAR.

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CHARLES E. CLARK, M. D., CHIEF OF CLINIC.

VENERAL DISEASES AND DISEASES OF THE SKIN.

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DISEASES OF CHILDREN.

CHARLES H. LESTER, M. D., CHIEF OF CLINIC.
ASSISTANT.

JOSEPH CLEMENTS, M. D.

ANNOUNCEMENT.

The Twenty-Seventh Annual Session of the Kansas City Medical College will open Tuesday, September 18th, 1895 and continue six months, to March 26, 1896.

It will be noticed that several changes and additions have been made in and to the Faculty, all of which, it is believed, will result in permanent benefit to the patrons of the institution.

The extension of the course of study through three years has been a very popular and successful move, and will soon be followed by a four year's course. It furnishes an opportunity for more careful and painstaking instruction in the laboratories and at the bedside, and is fully recognized by the Faculty as an important and valuable advance in medical education. In this College, the plan of dividing the class into sections of ten or less each, brings about a very close contact between student and instructor, which, in technical instruction, is of the greatest benefit to the student.

It is a sufficient endorsement of the school that the class of last year was the largest we have ever had.

ENLARGEMENT AND IMPROVEMENTS.

The College building is being practically rebuilt and greatly enlarged, (as will be seen by reference to the engraving), new lecture and laboratory rooms added, new furnace with steam heat, and improved facilities of all kinds for teaching, demonstrating and illustrating the several branches of medical science.

The College building is located at the northwest corner of Seventh and Washington Streets, and is most conveniently reached from the Union Depot by taking the Ninth Street cable car (K. C. Cable Co.) to Ninth and Washington, or the Eighth Street cable car (Inter-State Elevated Road) to Eighth and Washington Streets. This location is also convenient to the Broadway horse cars, the Twelfth Street and Fifth Street cable roads, and recent consolidation of these lines and their connections, make it easier and less expensive than heretofore to reach the various hospitals at which clinical lectures will be held.

REQUIREMENTS FOR ADMISSION.

FOR FIRST OR JUNIOR YEAR.

1. Evidence of good moral character: this in all classes.
2. Diplomas of Graduation from a recognized College, Scientific or High School, or first-class Teacher's Certificate from a State* or County or Civil Service Board of Examiners; or lacking one of these, the passing of a thorough examination in the studies taught in such institutions. *Provided*, that if any applicant for admission has taken a scientific course, including biological work, in a first-class university, such course will be considered as equivalent to attendance upon the first year of a three year's course.

FOR THE SECOND OR INTERMEDIATE YEAR.

Students who present credentials from creditable medical colleges, of attendance upon a full course of lectures, or the preparatory medical course of a first-class university, and graduates of reputable Colleges of Pharmacy, Dentistry and Veterinary Medicine, will be admitted to the Intermediate Class.

FOR THE THIRD OR SENIOR YEAR.

Students from other medical colleges presenting grades of more than seventy-five (75) in Anatomy, Physiology, Chemistry and Materia Medica, and students and practitioners who shall present evidence of attendance upon one or more courses of lectures previous to July, 1891, and who shall on examination attain the above named grades in the studies of the first and second years, will be admitted to the Senior Class. *Provided*, that if the applicant fails in only one branch he will be admitted conditionally and be allowed re-examination at the end of the year in that study.

These requirements for admission have been carefully revised so as to accord with the requirements of the American Medical

*MINIMUM REQUIREMENTS OF THE STATE BOARD OF HEALTH OF MISSOURI:

1. *Condition of admission to lecture courses.*—First, creditable certificates of good moral standing; second, diplomas of graduation from a good literary or scientific college or high school, or a first grade teacher's certificate."

College Association, and the requirements of the State Boards of Health and Examiners of those States having laws regulating the practice of medicine, now including nearly every State and Territory in the United States.

The following quotation from the Bulletin of one of these Boards, indicates the ruling established by all of them:

"That any medical college failing at any session to conform to our requirements, shall, upon satisfactory evidence thereof, be regarded as not in good standing for the session thus defective, and the Secretary is hereby directed not to issue certificates to the graduates thereof except upon the authority of this Board."

PREPARATORY COURSE.

The following preparatory course in Medical Language, Latin and Physics, is required of students who have not had training in these studies. It may be pursued before or during the first session, under the direction of E. M. Miller, B. S.

FIRST TWO MONTHS.

MEDICAL LANGUAGE.—*Text Book*—Campbell's Language of Medicine.

PHYSICS.—*Text Book*—Gage.

SECOND TWO MONTHS.

MEDICAL LATIN.—*Text Book*—Robinson's Grammar.

PHYSICS.—*Text Book*—Gage.

THIRD TWO MONTHS.

Technical words used in Chemistry, Anatomy, Physiology, Materia Medica, the Pharmacopœia and Prescription Writing.

PHYSICS.—*Text Book*—Gage.

Resident Students will be charged a fee of.....\$5 00
 Non-resident student's fee.....5 00
 Fee for postage and blanks.....\$3 00—8 00

COLLEGE COURSE OF INSTRUCTION.

The courses of study are graded so that some part of each can be completed in each year. One or more written examinations in each course of study, with frequent oral examinations, will be used as a means of determining standing from time to time.

The curriculum leading to the degree of Doctor in Medicine consists of three divisions: Junior, Intermediate, and Senior, passing by regular gradation to the preparation for graduation. The programme contemplates four years tuition of the preceptor and faculty, one year of which must have been before entering upon the regular College Course.

THE THREE YEAR'S COURSE.

FIRST OR JUNIOR YEAR.—Anatomy and Dissection, Physiology and Histology, Chemistry and Materia Medica. Dispensing and Drug Identification, Hygiene, Physical Diagnosis, Examinations in Osteology and Syndesmology, Physiology of Digestion, Inorganic Chemistry, Materia Medica, Hygiene (final.)

SECOND OR INTERMEDIATE YEAR.—Anatomy, Dissection, Physiology, Histology and Clinical Microscopy, Medical Chemistry, Urinalysis, Materia Medica, Prescription Writing and Therapeutics, Principles and Practice of Medicine, Surgery and Obstetrics, Physical Diagnosis, Clinical Surgery.

Final examinations will be made at the end of this year in Anatomy, Physiology, Chemistry and Materia Medica.

SENIOR OR THIRD YEAR —Practice of Medicine, Diseases of the Nervous System, Surgery, Minor Surgery and Surgical Appliances, Obstetrics, Diseases of Women, Diseases of Children, Ophthalmology and Otology, Medical Jurisprudence, Pathology and Bacteriology, Clinical Instruction in Medicine, Surgery, Dermatology, Obstetrics, Gynæcology, Diseases of Children, Ophthalmology and Otology, Diseases of Nervous System. Dispensary Service and Clinical Recording.

POST-GRADUATE INSTRUCTION.

Graduates may enter the Senior Class at any time, and will receive additional instruction in Clinical Microscopy and Urinary Analysis, together with Dispensary Work and Hospital Visitations.

If in attendance for five full weeks, a certificate of attendance will be granted, signed by the President and Secretary.

METHODS OF INSTRUCTION.

ANATOMY.

LECTURES.—During the First and Second Years there will be three to five lectures a week on Anatomy by Professor Herman E. Pearse and Doctor Frank R. Smiley. These lectures will be abundantly illustrated by means of manikins and by special dissections and demonstrations under the direction of the Demonstrators of Anatomy, to divisions of Classes.

DISSECTING.—The Dissecting Room of the College is being enlarged and improved, and is furnished with all the modern appliances for cleanliness and health, and is in every way convenient and admirably adapted for the purpose. On and after November 1st it will be open from 7 to 9:30 P. M., daily, except on Saturdays and Sundays. The Demonstrators of Anatomy, Doctors George M. Gray, T. B. Thrush, E. H. Thrailkill, P. P. Trueheart and B. H. Wheeler, will give their personal attention and supervision at all times, and students can rely upon careful and accurate instruction. Doctor L. A. Shaeffer will act as Prosector for the Professor of Anatomy.

Junior Course of Dissecting will begin January 2d, 1895, the Intermediate Course being completed before the Holiday intermission.

Each student, before he can obtain the Demonstrator's certificate, will be required to dissect and demonstrate satisfactorily the three parts of the body, including the viscera, and to perform such other exercises in Regional Dissection and Surgical Anatomy as the Demonstrators may require.

Material is abundantly obtained under the Anatomical Act, and students will be assigned to parts in the order in which their names appear on the Demonstrator's list, each subject being divided among six students.

Ample opportunity will be given to advanced students to do special dissecting under the direction of the Demonstrators.

PHYSIOLOGY.

Students of the First and Second Years will receive three lectures in Physiology each week, by Professor Robert T. Sloan, who will illustrate with such models, drawings, etc., as will best aid the students. Special attention will be paid to recent investigations and discoveries in Physiological Chemistry, and the nervous system.

In the First Year they will also receive practical laboratory instruction in Microscopy and Histology for four hours each week, under Doctor W. T. White.

In the Second Year they will have two exercises of two hours each per week in Human Histology, under the direction of Doctor Bellows.

In the Histological Laboratory every opportunity is given students for practical study and observation. Each one is supplied with the necessary slips, cover-glasses, stains, reagents, material and apparatus for

mounting, including use of microscope, access to microtomes, and other laboratory apparatus, at the moderate cost of \$5.00.

Examinations will be held at the end of the course, and Certificates of attendance upon and proficiency in this Laboratory work will be considered in fixing the grade attained in Physiology at the final examination.

CHEMISTRY AND PHYSICS.

First and Second Year students will receive two didactic lectures per week on General Chemistry by Professor T. S. Case, and practical instruction by Mr. John W. Carter and O. H. Parker, Ph. G., once a week in Physics and Chemical reactions, besides frequent examinations on practical points in Chemistry by both.

LABORATORY INSTRUCTION.—Students of the First Year will have two exercises per week of two hours each in the laboratory in practical Chemistry work in classes, by O. H. Parker, Ph. G.

Students of the Second Year will have two exercises of two hours each weekly in the Laboratory in Medical Chemistry, Toxicology, and Urinary Analysis under the direction of Mr. John W. Carter.

CHEMICAL LABORATORY.

The Chemical Laboratory has been refitted for class work, and the instruction given is practical and important. In the Junior Year classes of ten will be instructed in the technology of Specific Gravity, Acidimetry and Alkalimetry, the making and testing of Volumetric Solutions, the simpler tests for albumen, sugar, etc. In the Intermediate Year similar classes will be instructed in Urinary Analysis, including microscopic examination of milk and other normal and pathological fluids.

EXPENSE.—Each student will be supplied with suitable apparatus, reagents, etc., for which he will be required to advance an incidental fee of \$5.00.

Certificates of attendance upon and proficiency in Laboratory work will be considered in fixing grades attained in final examination.

MATERIA MEDICA AND THERAPEUTICS

To the students of the First Year Professor J. B. Connell will furnish instruction in Materia Medica and the physiological action of drugs, by lectures and recitations twice a week, exhibition of drugs, new preparations and chemicals, together with exercises in prescription writing.

Students of the Second Year will be instructed in the Physiological action and Therapeutic application of medicine by Professor J. B. Connell, who will deliver two lectures a week on these subjects.

PRACTICE OF MEDICINE.

Students of the Second and Third Years will receive two lectures a week on the Principles and Practice of Medicine by Professors E. W. Schauffler and Joseph Sharp. In addition to these, two clinical lectures a week at the City Hospital by Professors Schauffler and Sharp, on General Medicine.

Students of the Second Year will receive two exercises a week, in

classes of five, upon Physical Diagnosis by Doctor Ambrose Talbot. They will also have Hospital visitations and practical lectures three times a week, by Professors Schaufler and Sharp at the City Hospital and College Dispensary. Dispensary service in classes of ten.

Students of the Junior Class will receive instructions once a week in Physical Diagnosis, by Doctor Franklin E. Murphy, Instructor.

Students of the Third Year will receive one lecture a week on Diseases of the Mind and Nervous System, by Professor H. O. Hanawalt.

SURGERY.

Students of the Second and Third Years will receive two lectures a week by Professor J. D. Griffith upon the Principles and Practice of Surgery. Also two lectures a week on Operative Surgery by Professor A. L. Fulton, and two lectures a week by Professor J. F. Binnie on Surgical Pathology, Minor Surgery and Antiseptic Dressings.

CLINICAL.—Professors Griffith and Fulton will give two Clinical lectures weekly at the City Hospital; Professor J. F. Binnie two lectures a week at the College Dispensary.

There will also be daily Dispensary service and Hospital visitations by Professors Griffith, Binnie and Fulton, and a course of lectures upon Abdominal Surgery by Doctor A. H. Cordier.

Students of the Third Year will have ten exercises in Operative Surgery during the session, under the direction of Professor A. L. Fulton.

OBSTETRICS.

This most important branch of a modern medical education will be taught by lectures and demonstrations on the manikin recently imported from Europe, and particular attention will be paid to diagnosis of position and presentation; to operative obstetrics and to obstetric antisepsis, and the care of the puerperal woman. No department of the medical college is of more vital worth to the recent graduate than that of midwifery, and it is a matter of pride that the average number of cases reported by the members of the graduating class of '95 was *eight*, thus affording each man a practical knowledge of the subject before beginning his medical career.

This department will be under the management of Professor Geo. C. Mosher.

One lecture weekly will be delivered by Professor S. S. Todd on the Pathology of Pregnancy and Labor, Obstetric operations and the Pathology of Puerperium.

CLINICAL OBSTETRICS.—Under the charge of Professor Mosher and a most efficient Obstetrical Staff, students will be assigned cases in the Out-Door Midwifery service in turn. The practical work of diagnosis by palpation and auscultation of the pregnant abdomen will be given especial attention at the Dispensary.

PATHOLOGY AND BACTERIOLOGY.

LABORATORY WORK.—The students of the Second and Third Years will have the advantage of additional immersion lenses and fine apparatus

for Bacteriological work, recently purchased for more thorough instruction in Sterilization, preparation of Culture Media, preparation of Plates and Roll Tubes, Isolation, Mounting and Staining, of Moulds, Yeasts, Bacteria and Spores, and in the Biological Examination of Air, Water and Foods.

The students of the Third Year will also receive instruction in the Technology of Pathogenetic Organisms and their products, including Isolation and Cultivation, Mounting and Staining, and Inoculation of Animals, together with experiments in Antisepsis and Disinfection.

A fee of \$5.00 will be charged for slips, covers, stains, test tubes, etc., and for use of microscope with immersion lens, sub-stage condenser, closet for cultures, access to incubators, microtomes, and other laboratory apparatus.

Certificates of attendance and proficiency will be considered in fixing grades at final examinations.

DISEASES OF WOMEN.

Students of the Third Year will receive one lecture a week on Diseases of Women by Professor J. H. Van Eman; also one clinical lecture per week on the same subject by Professor Van Eman. Professor T. J. Beattie will also give one lecture each week on this subject at the Dispensary.

DISEASES OF CHILDREN.

Students of the Third Year will receive one lecture each week by Professor Charles H. Lester on the subject of Diseases of Children; also a clinical lecture each week from cases presented at the Dispensary, by the same teacher.

OPHTHALMOLOGY AND OTOTOLOGY.

Students of the Third Year will receive one didactic lecture per week and one clinical on Ophthalmology and Otology by professor W. C. Tyree, who will also give instruction once a week in Instrumental Diagnosis and the use of the Ophthalmoscope, and practical work at the Dispensary.

Professor J. H. Thompson will also give a weekly clinical lecture on these subjects at the City Hospital.

LARYNGOLOGY.

Students of the Third Year will have a weekly exercise or clinical lecture on Laryngology, with instruction in the use of the Laryngoscope, by Professor C. E. Clark, clinical lecturer on this subject.

MEDICAL JURISPRUDENCE AND HYGIENE.

The students of the Third Year will receive one lecture per week during the first half of the session by Hon. Alexander New upon Medical Jurisprudence and methods of making a Post Mortem examination; also two lectures per week to Junior students during the second half of the session, upon Hygiene by Doctor Geo. E. Bellows.

DERMATOLOGY.

Students of the Third Year will receive one lecture per week (frequently clinical) by Doctor Wm. Frick, upon Diseases of the Skin.

CLINICAL ADVANTAGES.

By reference to the items below it will be seen that the clinical advantages of the Kansas City Medical College are unsurpassed in the West, and that the methods of instruction, as shown above, are of the most thorough and practical character.

Kansas City, Missouri, and Kansas City, Kansas, have a population of over two hundred thousand, and furnish abundance of clinical material at the hospitals located in them, and at the College Dispensary.

CITY HOSPITAL—KANSAS CITY, MO.

Two afternoons in each week are devoted to the visitation of this hospital, at which lectures on Clinical Medicine, Surgery, Dermatology, Gynecology, Ophthalmology, Otology and diseases of Nervous System are delivered. One Intern of this hospital will hereafter be nominated by the Faculty of this College.

SISTER'S HOSPITAL—7TH AND PENN STREETS.

This hospital is within one block of the College building, and affords the students many opportunities of seeing interesting cases.

GERMAN HOSPITAL.

This hospital is close to the City Hospital, and as Professors Beattie, Fulton and Talbot are members of the staff, it is accessible to the classes of this college.

SAINT MARGARET'S HOSPITAL—KANSAS CITY, KANS.

This large hospital cares for the charity patients of Kansas City, Kansas, and furnishes many rare cases. It may be reached by a ten minutes' ride on the Elevated road from Eighth and Washington streets, one block from the College building. Professors Tyree, Mosher, Bellows, Gray and Talbot are on the staff of this hospital.

SCARRITT TRAINING SCHOOL FOR NURSES AND HOSPITAL.

Professors Tyree and Sloan are members of the Faculty of this school, and also members of the hospital staff, and they will have the privilege of taking classes to this hospital, which is reached by the Northeast Electric Railway.

COLLEGE DISPENSARY.

This Dispensary is open daily from 1 to 3 P. M., and as it is accessible from Wyandotte, Armourdale and Kansas City, Kansas, as well as from every part of Kansas City, Mo., the attendance is large. During the coming session the abundance of clinical material thus afforded will be much more fully utilized than has been done heretofore.

As heretofore, patients from outside the city requiring treatment or surgical operation, who are poor, and willing to go before the class, will receive such help free of charge.

BOOKS RECOMMENDED.

ANATOMY.—TEXT BOOKS—Gray, Morris, Holden's Dissector.

PHYSIOLOGY AND PHYSIOLOGICAL PHYSICS.—TEXT BOOKS—Landois, Flint, Foster, Raymond.

HISTOLOGY AND MICROSCOPY.—Klein, Schafer.

CHEMISTRY.—TEXT BOOKS—Bartley's Medical, Fownes' Elements, Simons' Manual 1895, Charles' Physiological and Pathological, Pellew's Medical and Physiological, Draper's Medical Physics.

MATERIA MEDICA AND THERAPEUTICS.—TEXT BOOKS—H. C. Wood, Bartholow.

MEDICINE.—TEXT BOOKS—Loomis, Flint, Osler, Struempell, Da Costa.

PHYSICAL DIAGNOSIS.—Loomis, Flint.

DISEASES OF CHILDREN.—TEXT BOOKS—J. Lewis Smith, Meigs, Pepper and Hensch.

SURGERY.—TEXT BOOKS—American Text Book, Wyeth, Tilman, Moulin, Stimson's Fractures and Dislocations, Da Costa, Gregg Smith.

OBSTETRICS.—TEXT BOOKS—Lusk, Playfair, Parvin, Grandin and Jarman's Obstetric Surgery.

PATHOLOGY AND BACTERIOLOGY.—Pathological Anatomy and Histology, Delafield and Prudden, Practical Bacteriology, Sternberg.

DISEASES OF WOMEN.—TEXT BOOKS—Thomas-Munde, Pozzi, Garrigue.

DERMATOLOGY.—Durhing, Hyde.

EYE, EAR AND THROAT.—Noyes, Roosa, Buck, Lenox, Browne, Seiler.

MEDICAL JURISPRUDENCE.—TEXT BOOKS—Reese, Tidy.

HYGIENE.—Rohe's Text Book of Hygiene.

DICTIONARIES.—Thomas, Gould, Billing's National Medical Dictionary.

ARRANGEMENT OF TIME.

Schedules of lectures and exercises for the session of 1895-'96 will be issued at the beginning of the session. In the first year the student will attend four didactic lectures daily, and have from four to six hours work daily in the Laboratories and Dissecting Room.

In the second year four didactic lectures daily, two to four hours work daily in the Laboratories and Dissecting Room, and two to four hours daily clinical instruction in Hospital Visitations and Dispensary service.

In the third year two didactic lectures daily, with four to six hours daily chemical instruction in Hospital Visitations and Dispensary service, together with the opportunity to do special Laboratory work and Dissecting.

EXAMINATIONS

Will be made in Anatomy, Physiology, Chemistry and Materia Medica at the end of the second year.

In Therapeutics, Medicine, Surgery, Obstetrics, Pathology and Bacteriology, Diseases of Women, Diseases of Children, Ophthalmology and Otology, Medical Jurisprudence and Hygiene at the end of the third year. Examinations will begin March 17, 1896.

Before the beginning of the examination, the candidates must place in the hands of the Secretary of the Faculty the evidence of the payment of all fees, and if applicants for the degree, they must file with the Secretary the evidence required for graduation. All examinations will be made in writing.

Certificates of attendance upon Clinic will be considered in fixing grades obtained at the final examination in Medicine, Surgery, Obstetrics, Diseases of Women, Diseases of Children, Ophthalmology and Otology.

REQUIREMENTS FOR GRADUATING.

1. Every candidate must be twenty-one years of age and furnish evidence of a good moral character. 2. Evidence of having studied medicine for four years, including time spent in college. 3. Evidences of attendance upon three terms of lectures of not less than six months and not in the same year, the last of which must have been at this college. 4. Evidence of having passed the intermediate and final examinations. 5. Evidence of having dissected the whole body.

HOSPITAL AND OTHER POSITIONS.

A number of places in the City Hospital and City Physician's office, some of which pay a small salary, are open to medical students, and through the courtesy of the City Physician, a number of the students of this College have annually received these appointments.

Two house officers are annually chosen at St. Margaret's Hospital by competitive examination. These officers receive board and washing free and enjoy the unrivaled clinical advantages of this large hospital. These positions are open to second and third year students.

Places in the Sisters' Hospital and the College Dispensary, are also open to students, and will be filled by competitive examination.

Members of the Faculty, annually, assist students to secure places in

which they can earn money to help defray their expenses during the session.

The Dispensary is open the whole year, and students remaining in the city have the privilege of acting as assistants to members of the staff.

PRIZES.

HOLDEN PRIZE FUND.—This fund of one thousand dollars (\$1,000), the gift of Howard M. Holden, Esq., of this City, yields the sum of one hundred dollars (\$100) annually, which constitutes a cash prize to be awarded at each commencement to the student who has the best standing on final examination in all branches.

FACULTY PRIZE.—Twenty-five dollars (\$25) to the student attaining the second best standing in all branches.

PROFESSOR J. D. GRIFFITH'S PRIZE.—International Cyclopædia of Surgery will be given for the best grade in the examination of Surgery, excepting when such student has already taken the Holden or Faculty prize, when the prize will go to the next best.

PHYSICIANS' SUPPLY CO. PRIZE.—A pocket case of Surgical Instruments. Awarded for the best plaster dressing suitable for fracture of leg under the following conditions:

Each competitor is to put a dressing, to the knee, on the leg of some friend, or a dispensary patient, between 1 and 2 P. M., and furnish such person with sealed envelope containing his (competitor's) name and address. At between 3 and 4 P. M., of the same day, the judges will view the dressings, and after deciding which is the best, will open the envelopes and award the prize.

Date of competition, March 10th 1896. Judges, Professors J. D. Griffith and J. F. Binnie.

FEES.

Matriculation, (paid but once)..... \$ 5

FIRST YEAR.

General Admission\$50
 Practical Anatomy..... 10
 Practical Chemistry and Histology (see page 11)..... 10— \$70

SECOND YEAR.

General Admission\$50
 Practical Anatomy..... 10
 Practical Chemistry and Histology (see page 11)..... 10— \$70

THIRD YEAR.

In case the first two years have been spent at this College.....	\$30
Graduation Fee.....	20
Practical Bacteriology (see page 13).....	5— \$55
General Admission to New Students	50

POST-GRADUATE COURSE.

Matriculation (if not an Alumnus).....	\$ 5
Fee for Five Weeks' Course.....	20
Practical Anatomy.....	10

Only one-half of the lecture fees charged to sons of physicians.

All fees must be paid to the Secretary within sixty days after the opening of the session.

These fees are charged by the year and not by the course, although any student may pay for the whole course in advance and not be subject to any increased charges, which may be made at any session.

The Practical Anatomy and General Admission tickets, with certificate of attendance, will not be issued until March 10th, 1896.

INFORMATION FOR STUDENTS.

All tickets are issued by the Secretary of the Faculty, to whom all fees must be paid at his office at the College.

The officers and members of the Faculty will take pleasure in giving students information and advice in regard to text books and methods of study.

Mr. E. B. Huntsman, the Janitor, will assist the students to procure rooms and boarding, which can be had for from \$3 to \$5 per week.

On arriving in the city, students should at once proceed to the College building, Seventh and Washington, or to the office of the Dean or Secretary, at the College. Office hours 9 to 10 A. M., 1 to 2 P. M.

For further information, address

THEO. S. CASE, M. D.,

* 717 Wall Street.

Secretary of Faculty.

CATALOGUE OF STUDENTS BY CLASSES.

COMPLETION OF TWENTY-SIXTH YEAR.

STATISTICS.

TOTAL NUMBER 1894-'95, 124.		TOTAL NUMBER IN 25 YEARS.	
In Junior Courses	49	Matriculates	1206
In Intermediate Courses	80	Total number graduates	861
In Senior Courses	86	Per cent. graduates to Matriculates	80
Graduates of 1895		27	
Total Number of graduates for 25 years		884	
Per centage of applicants rejected		6	
1st DECENNIOUM, 1869-'79.		2d DECENNIOUM, 1878-'89.	
Matriculates	248	Matriculates	888
Annual Average	24	Annual Average	88.8
Graduates	78	Graduates	141
Annual Average	7	Annual Average	14
Per Cent. Average	80	Per Cent. Graduates to Matriculates	86.5 per cent
		3d DECENNIOUM, 6 YEARS, 1889-'95.	
		Total Matriculates	574
		Annual Average	112
		Graduates	147
		Annual Average	24
		Per Cent. Graduates to Matriculates	80

GRADUATES OF 1895.

Geo. H. Alch.	George C. Kreeger.
Wallace A. Armour.	A. E. Krueger.
Edwin D. Beem, M. D.	E. E. Paddock.
J. G. Bennett.	E. D. W. Peugh.
Horace S. Bowers.	J. Walter Rowland.
Samuel C. Clark.	Orlan D. Sharpe.
Harry L. Chambers.	N. A. G. Tesson.
John F. Chandler.	George N. Towers.
William F. Cooke.	Arthur H. Wall.
C. V. Corns.	Benj. F. Watson.
C. C. Harbaugh.	Franklin E. Way.
Howard Hill.	Charles O. West.
J. H. Hughes.	William T. White.
John C. Kitchen.	

PRIZES AWARDED.

Howard M. Holden prize—\$100 for best standing on examination in all branches—H. L. Chambers.
 Faculty prize—\$25 for second best standing—Howard Hill.
 Professor Griffith's prize—International Cyclopaedia of Surgery, Best standing in surgery (if not already awarded a prize)—John F. Chandler.
 Professor Griffith's prize—for best set of Clinical notes, case surgical instruments—H. L. Chambers.
 J. D. Porter—Physicians' Supply Company's prize—case of surgical instruments, for best plaster dressing of leg, suitable for fractures—John C. Kitchen.

POST-GRADUATES.

Rollin J. Smith, M. D.	G. M. Liston, M. D.
F. T. Johnson, M. D.	E. Smith, M. D.
David E. Beem, M. D.	H. S. Gordon, M. D.
Charles V. Corns, M. D.	Horace F. Foster, M. D.

SENIOR CLASS.—Session 1894-'95.

George H. Alch.	George C. Kreeger.
Wallace A. Armour.	E. A. Krueger.
Gerrett J. Bennett.	V. McMullen.
Horace S. Bowers.	Edward E. Paddock.

Harry Leslie Chambers, B. S.
 Samuel C. Clark.
 John F. Chandler, Ph. G.
 William F. Cooke.
 Charles V. Corns.
 Charles C. Harbaugh.
 Howard Hill.
 Felix Hobson.
 John H. Hughes.
 John C. Kitchen.

Edward DeW. Peugh.
 Walter Rowland, B. S.
 Orlan D. Sharpe.
 George N. Towers.
 N. Albert G. Tesson.
 Franklin E. Way.
 Arthur H. Wall.
 Benj. F. Watson.
 Charles O. West.
 William T. White.

INTERMEDIATE CLASS.—Session 1894-'95.

John S. Amyx.
 Harry Allen.
 Oliver S. Barber.
 Lee M. Burns, Ph. G.
 J. W. Carter.
 John W. Crabtree.
 Colin Cable.
 William Cairns.
 Hugh H. Cole.
 Orson R. Crooks.
 Forrest W. Dailey.
 Edwin D. Ebright.
 James R. Fox.
 John H. George.
 Harry L. Hawley.
 Orville L. Helwig.
 W. B. Hilton.
 Arthur A. Hobbs.
 Joseph T. Hornback.
 Andrew O'C. Joy.
 William Lothian.
 K. C. McKinney, B. A.
 H. W. Maloney, Ph. G.

James R. Miles, Ph. G.
 William A. Miller.
 John W. Miller, Ph. G.
 Charles N. Petty.
 J. B. Paul, Ph. G.
 William Richardson, Ph. G.
 William A. Robinson.
 John S. W. Riddell, B. S.
 William M. Sams, L. B.
 E. L. Simonton.
 Benj. Skinner, B. S.
 S. K. Shenck.
 Delmar H. Smith.
 James R. Steadman.
 Samuel Steele.
 Ernst L. Stephenson.
 Arthur H. Stevens.
 R. F. Summers.
 Albert S. Talbott.
 Thomas J. Ward.
 C. T. White.
 Alfred M. Wright.
 Oscar O. Young.

JUNIOR CLASS.—Session 1894-'95.

Frank M. Arnold.
 Moses Adkins Beeler.
 William Milton Bell.
 William Ford Botts.
 Samuel Thomas Campbell.
 Victor James Cumpton.
 Achie L. Dougan.
 John Ross Green.
 John Vance Green.
 Albertus Jay Henderson.
 Harry Heylman.
 Andrew B. Hintz.
 Hugh Pierrie Huyette.
 Benjamin Jacobs.
 Walter Kelso Jones.
 Franklin Waller Koons.
 Loren Ezra Lee.
 James Lillis.
 Ulysses Grant McElvain.
 Thomas Warring Martin.

Frank Day Mitchell.
 Walton Herman Morris.
 Olaf Mortensen.
 George William Neiberger.
 Aloysius Eugene O'Flaherty.
 M. W. Osborne.
 Vernon Cole Patton.
 Albert McAllister Pearson.
 Nelson E. Peck.
 Dalton Lee Phillips.
 Herbert Arthur Rhoades.
 Harvey W. Saylor.
 James Franklin Sawyer.
 Charles Vernon Slaughter.
 Harry Patrick Smith.
 Frank Joseph Soden.
 James Johnston Stewart.
 Thomas Levi Tuck.
 Fred K Taylor Van Eman.
 William Preston Wilson.

Contents on Inside Cover Page.
CIRCULATES IN EVERY STATE AND TERRITORY.

SIXTEENTH YEAR—No. 12.

WHOLE NUMBER 192.

THE Kansas City Medical Index.

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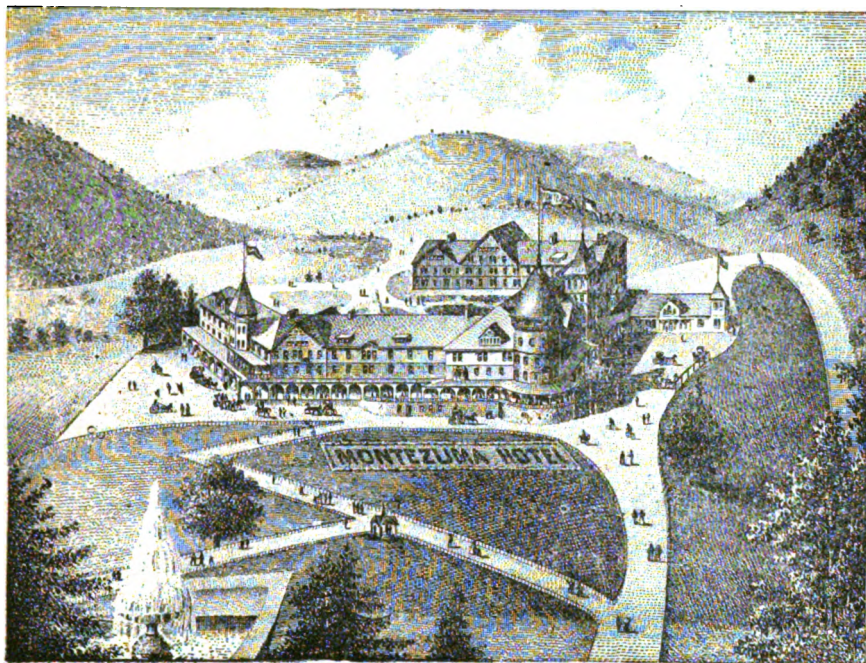
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Sig. One teaspoonful three times a day.

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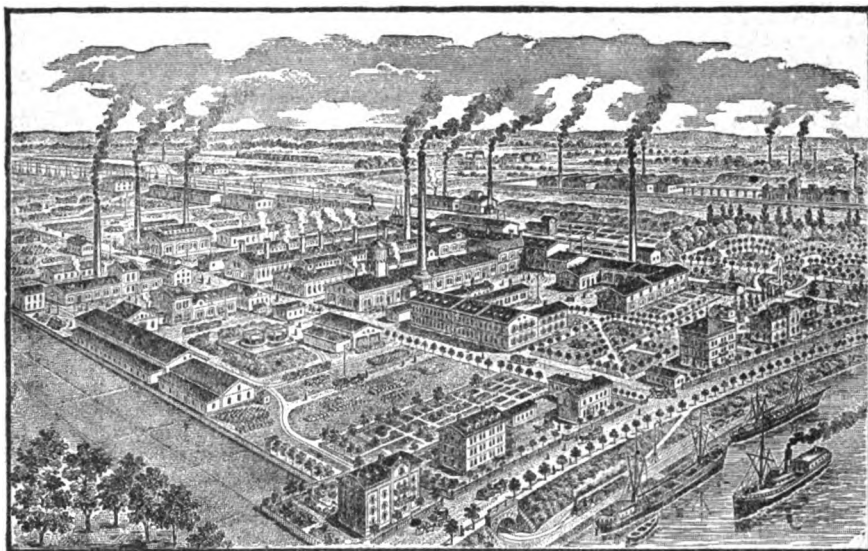
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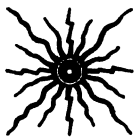
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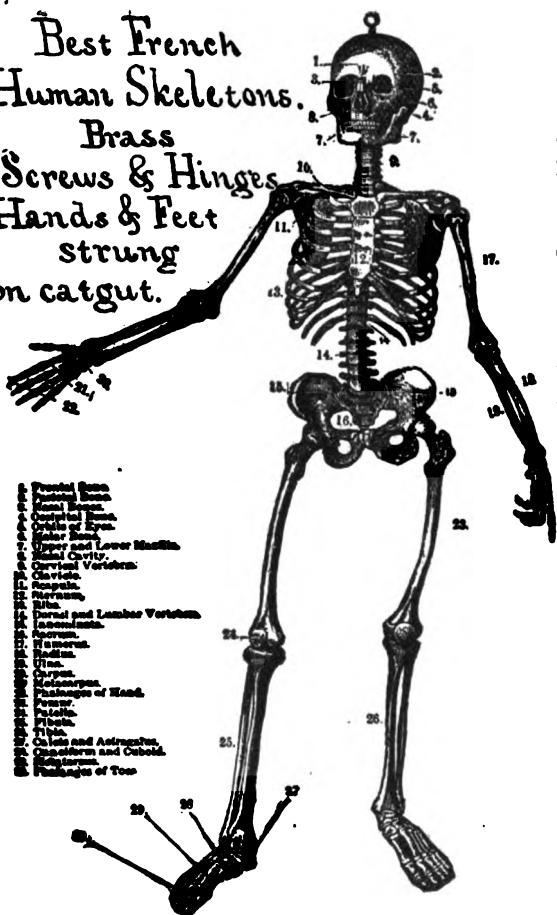
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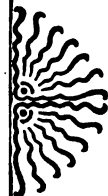
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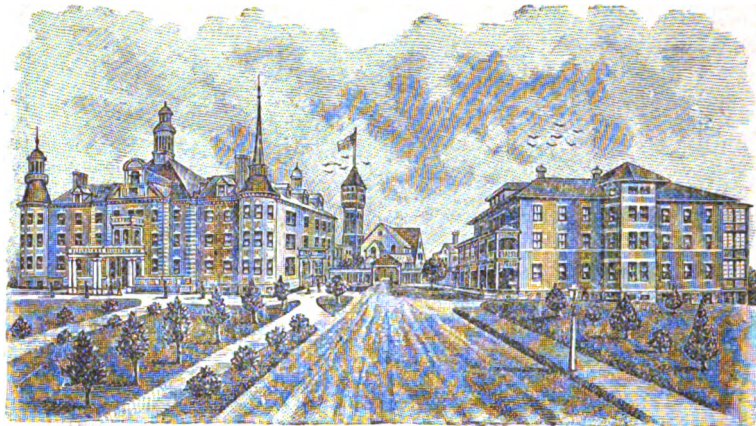
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Med. prop.—Anodyne, Soporific. Dose, 1.

Mercury Prot. Iodid.....½ gr.
Med. prop.—Alternative. Dose, 1 to 4.

Mercury Prot. Iodid.....½ gr.
Med. prop.—Alternative. Dose, 1 to 2.

Mercury Prot. Iodid.....½ gr.
Med. prop.—Alternative. Dose, 2 to 4.

Mercury Iodide Red.....1-16 gr.
Med. prop.—Alternative. Dose 1 to 3.

Morphinæ Sulph.....1-20 gr.
Med. prop.—Anodyne.

Morphinæ Sulph.....1-10 gr.
Med. prop.—Anodyne. Dose, 1 to 2.

Morphinæ Sulph.....1-6 and ½ gr.
Med. prop.—Anodyne. Dose, 1 to 2.

Morphinæ Sulph.....½ and ½ gr.
Med. prop.—Anodyne. Dose, 1 to 2.

Podophyllin....1-10, 1-6, ½, ¼ and ½ gr.
Med. prop.—Cathartic. Dose, 1 to 4.

Podophyllin Comp.
Med. prop.—Cathartic and Tonic. Dose, 1 to 2.
Podophyllin, ½ gr.
Ext. Hyoscyami, ½ gr.
Ext. Nux Vomica, 1-16 gr.

Strychnine, 1-16, 1-20, 1-30, 1-32, 1-40 and 1-100 gr.
Med. prop.—Nerve Stimulant, Tonic. Dose, 1 to 3.

Strychninæ Sulph.....1-32 gr.
Med. prop.—Tonic. Dose, 1 to 2.

Veratrinæ Sulph.....1-12 gr.
Med. prop.—Powerful Topical Excitant. Dose, 1

Zinc Phosphide.....1-6 and ½ gr.
Med. prop.—Tonic. Dose, 1 to 3

Please specify Warner & Co.'s when ordering or prescribing.

Granules sent by mail to any address

WILLIAM R. WARNER & Co., Chemists,

1228 Market Street, Philadelphia.

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INDEX OF DISEASES TREATED WITH

PARVULES

The dose of any Parvule will vary from one to four, according to age or the frequency of administration. For instance, one Parvule every hour, two every two hours, or three every three hours, and so on for adults. For children, one three times a day is the minimum dose. It is claimed by many practitioners that small doses, frequently repeated, exert a more salutary effect.

ATONIC DYSPESIA.	
Parv. Nux Vomica.....	1-50 gr.
BILIOUS CONDITIONS.	
Parv. Calomel.....	1-20 gr.
BRONCHITIS OF CHILDREN.	
Parv. Tartar Emetic.....	1-100 gr.
CONSTIPATION.	
Parv. Aloin.....	1-10 gr.
DIARRHŒA.	
Parv. Corrosive Sublimate.....	1-100 gr.
EXANTHEMATOUS SKIN DISEASES.	
Parv. Iodide Arsenic.....	1-100 gr.
HABITUAL CONSTIPATION.	
Parv. Podophyllin.....	1-40 gr.
HYDATID UTERINE GROWTH.	
Parv. Ergotine.....	1-10 gr.
INCONTINENCE OF URINE.	
Parv. Cantharis.....	1-50 gr.
INFLAMMATORY PROCESS.	
Parv. Aconite.....	1-20 gr.
INFLUENZAS.	
Parv. Iod. Arsenic.....	1-100 gr.
ITCHING SKIN ERUPTIONS.	
Parv. Iod. Arsenic.....	1-100 gr.
MUCOUS RECTAL DISCHARGES.	
Parv. Tannin.....	1-10 gr.
NAUSEA.	
Parv. Ipecac.....	1-50 gr.
RETARDED MENSTRUATION.	
Parv. Ergotine.....	1-10 gr.
SCROFULA.	
Parv. Calomel, 1-20 gr.	Aloin, 1-10 gr.
SICK HEADACHE.	
Parv. Nux Vom.....	1-50 gr.
SICKNESS OF PREGNANCY.	
Parv. Belladonna.....	1-20 gr.
SLUGGISH BOWELS.	
Parv. Podophyllin.....	1-40 gr.
SPERMATORRHŒA.	
Parv. Phosph.....	1-200 gr.
SUMMER DIARRHŒA.	
Parv. Mercury with Chalk.....	1-10 gr.
SYPHILIS.	
Parv. Calomel.....	1-20 gr.
SYPHILITIC HEADACHE.	
Parv. Corrosive Sublimate.....	1-100 gr.
TORPIDITY OF LIVER.	
Parv. Podophyllin.....	1-40 gr.
UTERINE HEMORRHAGES.	
Parv. Ergotine.....	1-10 gr.
VASCULAR EMPHYSEMA.	
Parv. Digitalis.....	1-20 gr.

This is a class of medicines (spherical in form) designed for the administration of remedies in small doses for frequent repetition in cases of children and adults. The elegance and efficiency of Parvules, and the avoidance of cumulative effect depends on our mode of preparation.

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One hundred kinds, 20c. per 100. All kinds, \$1.00 per 500.

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CAUTION—Parvules are not labeled Pink Granules.

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For Physicians' Use.—Bromo Lithia is an extremely potent remedy in the treatment of Rheumatism, Rheumatic Gout, and Gouty Diathesis, originated by Wm. R. Warner & Co. It consists of Salicylate Lithium, 10 grs. and Bromide Sodium, 10 grs. in each dessertspoonful.

Granular Effervescent

Bromide of Lithia

Each teaspoonful contains FIVE grains of the chemically pure salt.

This preparation has been strongly recommended as a remedy for Epilepsy and as a Hypnotic of great value.

Granular Effervescent

Salicylate of Lithia

Dose.—A teaspoonful containing ten grains of salt.

A convenient and pleasant Remedy in Gout and Rheumatism.

This preparation is intended for Physicians' use, and will be found to possess advantages over Salicylic Acid, being less irritating to the stomach, and combining the efficacy of Lithia and Salicylic Acid.

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ANTI-RHEUMATIC.

Each heaping teaspoonful contains ten grains of Salicylate of Sodium.

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Each heaping teaspoonful contains four grains of the chemically pure salt. Valuable in Rheumatic, Gouty and analogous disorders, and acceptable to delicate stomachs where the Carbonate is not well borne.

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Each heaping teaspoonful contains five grains of Carb. Lithia and ten grains of Bi-Carb Potash

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Carbonate Lithia

Each heaping teaspoonful contains four grains of the chemically pure salt. A remarkable and often magical resolvent of Gouty Rheumatic deposits.

Dr. A. Garod, a well-known English authority on Gout, who was the first physician to introduce the Lithia Salts in the treatment of the gouty diathesis, states that their action is materially increased by being administered in a freely diluted form. The effervescing salts of Lithia furnish an easy and elegant way of applying Dr. Garod's methods.

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WITH

Bromide of Potash

Anti-Rheumatic, Sedative.

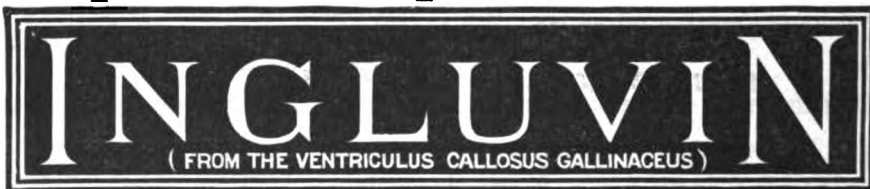
Each heaping teaspoonful contains ten grains of Salicylate of Soda, and ten grains of Bromide of Potash.

The dose is usually one large teaspoonful in half a glass of water, three times a day, before eating.

This is the minimum dose for adults, and may be increased with advantage in many cases of Rheumatism and Rheumatic Gout.

This preparation is particularly valuable in cases of Lythiasis, in which the more prominent symptoms are inflammation of the mucous membranes of the respiratory and digestive tracts and ill-defined muscular soreness.

Superior to Pepsin of the Hog.



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OF
EXCELLENCE.

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Salicylate Sodium.

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MERRELL.

An eligible combination of Methyl Salicylate and Tinct. Citro-Chloride Iron, in a pleasant and permanent form.

EACH FLUID DRACHM CONTAINS
True Salicylic Acid—from Oil Wintergreen (Methyl Salicylate).....5 grs
Tinct. Citro-Chloride Iron.....5 min
Not Sold in Bulk.

ELIXIR

Pinus Compositus. **MERRELL.**

Each Fluid Drachm Contains
White Pine, Fresh Bark.....2½ grs
Balm Gilead Buds.....2 "
Spikenard.....2 "
Cherry Bark.....1½ "
Ipecac.....¾ gr
Sanguinarin Nitrate.....1-64 "
Morphine Acetate.....1-16 "
Ammonium Chloride.....¼ "
Chloroform.....½ "
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GREEN

TINTURE

GELSEMIUM.

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and its

SODIUM SALT.

are slow but certain poisons, produce symptoms closely resembling diphtheria typhus. patients become delirious. dangerous to human life. have to be watched and not to be treated. retard convalescence. should not be administered internally, however much they may have been distilled or purified.

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CINCINNATI.

NEW YORK.

MEDICAL SOCIETY CALENDAR.

Secretaries of Societies will please send notices of omissions or errors in this calendar.

American Medical Association—Annual meeting at Atlanta, Ga., 1896. R. Beverly Cole, M. D., of California, President; Wm. B. Atkinson, M. D., of Pennsylvania, Secretary.

State Medical Association of Missouri—Annual meeting at Hannibal, May 21st, 1895. J. M. Richmond, M. D., president, St. Joseph, Mo.; Dr. Fry, Secretary, St. Louis, Mo.

Kansas State Medical Society—Annual meeting at Topeka.

Jackson County Medical Society—Meets 2nd and 4th Thursday evenings of each month, at 8 p. m. President, Louis W. Lusher, M. D.; Secretary, J. T. Mitchell, M. D.

Kansas City Academy of Medicine—Meets every Saturday night at Midland Hotel, Parlor S. All members of medical profession cordially invited. John Punton, M. D., president; J. W. Kyger, M. D., secretary.

Kansas City District Medical Society—Meets first Thursday in September, December, March and June. Convenes always at Kansas City. Annual meeting in September. Dr. J. T. Marsh, president, Liberty, Mo.; Dr. E. W. Schaffler, secretary, Kansas City, Mo.

Indian Territory Medical Society—meets quarterly. Place of meeting migratory. Next meeting at Eufaula, I. T., December 3rd and 4th, 1895. J. S. Fulton, M. D. Pres., Atoka, I. T.; G. R. Rucker, M. D., Sec'y., Claremore, I. T.

Oklahoma Territory Medical Society—Meets semi-annually. Place of meeting migratory. Next meeting at Oklahoma City, May 1896. Dr. T. A. Cravens, Oklahoma City, President; Dr. L. Haynes Buxton, Secretary, Guthrie.

Tri-State Medical Society of Iowa, Illinois and Missouri—Semi-annual meeting at St. Louis, Mo., April 2nd, 3rd and 4th, 1895. James Moores Hall, M. D., President, St. Louis, Mo.; Frank Parsons Norbury, M. D., Secretary, Jacksonville, Ill.

New Mexico State Medical Society—Annual meeting at East Las Vegas, July 12th, 1895. G. W. Harrison, M. D., President, Albuquerque, New Mexico; Francis H. Atkins, M. D., secretary, East Las Vegas, New Mex.

Mississippi Valley Medical Association—Annual meeting at Detroit, Mich., September 3d to 6th, 1895. W. N. Wishard, M. D., President, Indianapolis, Ind.; F. C. Woodburn, M. D., Secretary, Indianapolis, Ind.

North Missouri Medical Society—Meets semi-annually. Place of meeting migratory. Dr. Woodson Moss, president, Columbia, Mo.; Dr. W. T. Lindley, secretary, Hamilton, Mo.

Northwest Missouri Medical Society—Session quarterly. Meets second Thursday in January, April, July and October. Annual meeting in April. Dr. J. A. McKennon, president, St. Joseph, Mo.; Dr. Milton Townsend, secretary, St. Joseph, Mo.

Missouri Valley Medical Society—Session semi-annual. Third Thursday of September and March. Meeting place migratory. President, Frederick S. Thomas, Council Bluffs, Ia.; first vice-president, F. W. Porterfield, Atlantic, Ia.; second vice-president, Rebecca Hanna, Red Oak, Ia.; treasurer, Thomas S. Lacey, Council Bluffs, Ia.; secretary, Donald Macrae, Jr., Council Bluffs, Ia. Next place of meeting, Atlantic, Ia., March 19th, 1896. Annual meeting in September.

Golden Belt District Medical Society—Session quarterly. First Thursday in January, April, July and October. Dr. J. W. Felty, president, Abilene, Kansas; Dr. E. B. LaFevre, secretary, Abilene, Kas.

Southeastern Kansas Medical Society—Meets quarterly. Place of Meeting migratory. Dr. J. B. Carver, Fort Scott, President; Dr. Cole, Girard, Secretary; Dr. Anderson, Chetopa, Treasurer.

Northern Kansas Medical Society—Session held semi-annually, in December and June. Place of meeting, Seneca. Dr. Harry Reding, President, Sabetha, Kansas; D. M. M. Wachter, secretary, Axtell, Kas.

Eastern Kansas Medical Society—Session quarterly. Meets second Tuesday in January, April, July and October. Meeting place migratory. Dr. L. L. Terwilliger, president, Lansing, Kansas; Dr. R. S. Magee, secretary, Topeka, Kansas.

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The ideal safe family laxative, known as "SYRUP OF FIGS," is a product of the California Fig Syrup Co., and derives its laxative principles from senna, made pleasant to the taste, and more acceptable to the stomach, by being combined with pleasant aromatic syrups and the juice of figs. It is recommended by many of the most eminent physicians, and used by millions of families with entire satisfaction. It has gained its great reputation, with the medical profession, by reason of the acknowledged skill and care exercised by the California Fig Syrup Co. in securing the laxative principles of the senna, by methods of its own, and presenting them in the best and most convenient form. The California Fig Syrup Co. has special facilities for commanding the choicest qualities of Alexandria senna, and its chemists devote their entire attention to the manufacture of the one product. The name "SYRUP OF FIGS" means, to the medical profession, the "family laxative, manufactured by the California Fig Syrup Co.," and the name of the Company is a guarantee of the excellence of its product. Informed of the above facts, the careful physician will know how to prevent the dispensing of worthless imitations, when he recommends or prescribes the original and genuine "SYRUP OF FIGS." It is well known to physicians that "SYRUP OF FIGS" is a *simple, safe and reliable* laxative, which does not irritate nor debilitate the organs on which it acts, and, being pleasant to the taste, it is specially adapted to ladies and children, although generally applicable in all cases. Special investigation of the profession invited.

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MEDICAL PROPERTIES:—The greatest

VALUE of the COMBINATION is it relieves those OBSCURE and CHRONIC OBSTRUCTIONS of GLAND ACTION—the KIDNEY, LIVER, PANCREAS, as well as the LYMPHATIC SYSTEM, which may exert so great an influence for evil on the economy. It enjoys the confidence of the medical profession, as its use is indicated in a wide range of diseases, particularly so in PERNICIOUS ANAEMIA, SKIN DISEASES, both SCALY and PAPULAR; has remarkable curative effects in SPECIFIC DISEASES and other manifestations of SYSTEMIC INFECTION, CHRONIC UTERINE and PELVIC DISEASES, and in complaints where an ALTERATIVE and TONIC is indicated. This COMBINATION proves that the UNITED ACTION of REMEDIES is often requisite when either, alone, is insufficient. Physicians when prescribing will please write: IODIDI ELIX. SEX—Walker-Green's—ONE BOTTLE. The druggist will please write directions on his own label. ELIXIR SIX IODIDES is always sold in 8 oz. oval bottles and never in bulk. Our ELIXIR SIX BROMIDES, ELIXIR SIX HYPOPHOSPHITES, and ELIXIR SIX APERIENS, cannot be excelled for clinical efficiency and palatability. Wholesale price per dozen: Iodides, \$8; Hypophosphites, \$8; Bromides, \$8. Aperiens, \$8. Send for descriptive circular. These Elixirs are kept in stock by wholesale druggists generally throughout the United States.

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very best manner to secure best surgical results. Pathological and Histological Laboratories are also a part of the school. The Faculty are also connected with most of the great hospitals and dispensaries in the city, where other clinics are held for the benefit of the matriculates of the Post-Graduate Medical School. Practitioners may enter at any time.

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Are you interested in the subject of "Hernia"? If so, did you ever notice the facility and ease with which the most obstinate rupture can be held by the hand? Of course you have. That being the case, what would you say to a truss constructed upon the same principle? Here it is.



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Each fluid drachm represents 15 grains of Combined Bromides.

Uses: Uterine Congestion, Headache, Epilepsy, and all
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DOSE.—One to two FLUID drachms, in WATER, three or more times a day.

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CHIONIA FROM **CHIONANTHUS.**

USES:

ALL DISEASES CAUSED BY HEPATIC TORPOR.

Does not purge, per se, but under its use the Liver
and Bowels gradually resume their normal functions.

DOSE.—One Fluid Drachm three times a day.

PEACOCK CHEMICAL CO., - ST. LOUIS.

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Specially Indicated in Phthisis and other Wasting Diseases.

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Given with Antipyretics TO PREVENT Cardiac Depression.

Each Pillet represents one one-hundredth of a grain of Cactina—the active proximate principle of Cactus Mexicana.

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Are now using our granules than ever before, they have realized that no medication produces such results as alkaloidal granules **WHEN PREPARED BY US**. Immediate therapeutic effects are obtained; the advantage of this is obvious.

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Emetine.....1-250
Hyosiamin.....1-250
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Mero. Bin. Iod.....1-67
Quinine Arsen.....1-67
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The regular price of these is \$1.50; we will send them for \$1.00 cash with order, or for \$1.50 we will send them in an elegant vest pocket case, provided this advertisement from the Medical Index is sent us.

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Foods are valuable because they become part and parcel of every tissue.

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"BABY POWDER,"
"The Hygienic Dermal Powder"
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